



Updated Philippine Development Plan 2017-2022





UPDATED
Philippine
Development Plan
2017-2022

Table of Contents

Foreword		xii
Preface		xiv
Part I	Introduction	
Chapter 1	Overview	5
Chapter 2	Global and Regional Trends and Prospects	21
Chapter 3	Overlay of Economic Growth, Demographic Trends, and Physical Characteristics	37
Chapter 4	Philippine Development Plan 2017-2022 Overall Framework	57
Part II	Building a High-trust Society ("<i>Malasakit</i>")	
Chapter 5	Ensuring Responsive, People-centered, Technology-enabled, and Clean Governance	71
Chapter 6	Pursuing Swift, Fair, and Humane Administration of Justice	87
Chapter 7	Promoting Philippine Culture and Values towards <i>Bayanihan</i>	97
Part III	Transforming Towards Equity and Resiliency ("<i>Pagbabago</i>")	
Chapter 8	Expanding Economic Opportunities in Agriculture, Forestry, and Fisheries and Ensuring Food Security	111
Chapter 9A	Expanding Economic Opportunities in Industry	129
Chapter 9B	Expanding Economic Opportunities in Services	147
Chapter 9C	Expanding Access to Economic Opportunities in I&S for Startups, MSMEs, and Cooperatives	159
Chapter 10	Human Capital Development Towards Greater Agility	171
Chapter 11	Ensuring Food Resiliency and Reducing Vulnerabilities of Filipinos	205
Chapter 12	Building Safe, Resilient, and Sustainable Communities	221

Part IV	Increasing Growth Potential ("<i>Patuloy na Pag-unlad</i>")	
Chapter 13	Reaching for the Demographic Dividend Across All Regions	233
Chapter 14	Vigorously Advancing Science, Technology, and Innovation	245
Part V	Enabling and Supportive Economic Environment	
Chapter 15	Ensuring Sound Macroeconomic Policy	265
Chapter 16	Promoting Competition	285
Part VI	Foundations for Sustainable Development	
Chapter 17	Attaining Just and Lasting Peace	297
Chapter 18	Ensuring Security, Public Order, and Safety	309
Chapter 19	Accelerating Infrastructure Development	323
Chapter 20	Ensuring Ecological Integrity, Clean and Healthy Environment	351
Part VII	Protecting the Rights, Promoting the Welfare, and Expanding Opportunities for Overseas Filipinos	
Chapter 21	Protecting the Rights, Promoting the Welfare, and Expanding Opportunities for Overseas Filipinos	373
Acronyms		383
Glossary		389
References		463
Updated PDP 2017-2022 Plan Steering Committee Members		467
Updated PDP 2017-2022 Planning Committees		469
Schedule of Updated PDP 2017-2022 Consultations		499
NEDA Board		501
NEDA Secretariat		503
Updated PDP 2017-2022 Secretariat		507

List of Tables and Figures

Chapter 1 Overview

Figure 1.1	The Philippine Development Plan Framework	7
Figure 1.2	PDP 2017-2022 Reforms Instituted	8
Table 1.1	PDP 2017-2022 Headline Indicators: Targets vs. Accomplishments, 2017-2019	12
Figure 1.3	Strategic Framework of the Updated PDP 2017-2022	14

Chapter 2 Global and Regional Trends and Prospects

Figure 2.1	GDP Growth	24
Figure 2.2	General Government Gross Debt (% of GDP)	26
Figure 2.3	Change in Population (%), 2020-2050	30
Figure 2.4	Total Dependency Ratio	31

Chapter 3 Overlay of Economic Growth, Demographic Trends, and Physical Characteristics

Figure 3.1	Average Regional Share in GDP, 2010-2018	39
Table 3.1	GRDP Growth Rate, 2010-2018	40
Table 3.2	Per capita GRDP, 2010-2018	41
Figure 3.2	Population by Region, 2015	42
Figure 3.3	Regional Projected Population, 2015-2025	43
Figure 3.4	Population of Metropolitan Areas: 2000, 2010, and 2015	44
Figure 3.5	Population of Major Cities: 2000, 2010, 2015	45
Figure 3.6	Major Urban Centers	46
Table 3.3	Network of Settlements	47

Chapter 4	Philippine Development Plan 2017-2022 Overall Framework	
Table 4.1	PDP 2017-2022 Core Indicators and Headline Targets	58
Figure 4.1	Updated Philippine Development Plan 2017-2022 Strategic Framework	60
Chapter 5	Ensuring Responsive, People-centered, Technology-enabled, and Clean Governance	
Table 5.1	Updated Plan Targets to Ensure Responsive, People-centered, Technology-enabled, and Clean Governance	72
Figure 5.1	Strategic Framework to Ensure Responsive, People-centered, Technology-enabled, and Clean Governance	74
Table 5.2	Legislative Agenda to Ensure Responsive, People-centered, Technology-enabled, and Clean Governance	83
Chapter 6	Pursuing Swift, Fair, and Humane Administration of Justice	
Table 6.1	Updated Plan Targets to Pursue Swift, Fair, and Humane Administration of Justice	88
Figure 6.1	Strategic Framework to Pursue Swift, Fair, and Humane Administration of Justice	89
Table 6.2	Legislative Agenda to Pursue Swift, Fair, and Humane Administration of Justice	94
Chapter 7	Promoting Philippine Culture and Values towards <i>Bayanihan</i>	
Table 7.1	Updated Plan Targets to Promote Philippine Culture and Values	98
Figure 7.1	Strategic Framework to Promote Philippine Culture and Values towards <i>Bayanihan</i>	99
Table 7.2	Legislative Agenda to Promote Philippine Culture and Values towards <i>Bayanihan</i>	106

Chapter 8	Expanding Economic Opportunities in Agriculture, Forestry, and Fisheries and Ensuring Food Security	
Table 8.1	Updated Plan Targets to Expand Economic Opportunities in Agriculture, Forestry, and Fisheries and Ensure Food Security	113
Figure 8.1	Updated Strategic Framework to Expand Economic Opportunities in Agriculture, Forestry, and Fisheries and Ensure Food Security	114
Table 8.2	Legislative Agenda to Expand Economic Opportunities in Agriculture, Forestry, and Fisheries and Ensure Food Security	125
Chapter 9A	Expanding Economic Opportunities in Industry	
Table 9A.1	Updated Plan Targets to Expand Economic Opportunities in Industry	131
Figure 9A.1	Strategic Framework to Expand Economic Opportunities in Industry	132
Table 9A.2	Legislative Agenda to Expand Economic Opportunities in Industry	143
Chapter 9B	Expanding Economic Opportunities in Services	
Table 9B.1	Updated Plan Targets to Expand Economic Opportunities in Services	149
Figure 9B.1	Strategic Framework to Expand Economic Opportunities in Services	149
Table 9B.2	Legislative Agenda to Expand Economic Opportunities in Services	156
Chapter 9C	Expanding Access to Economic Opportunities in I&S for Startups, MSMEs, and Cooperatives	
Table 9C.1	Updated Plan Targets to Expand Economic Opportunities in I&S for Startups, MSMEs, and Cooperatives	160
Figure 9C.1	Strategic Framework to Expand Economic Opportunities in I&S for Startups, MSMEs, and Cooperatives	161
Table 9C.2	Legislative Agenda to Expand Economic Opportunities in I&S for Startups, MSMEs, and Cooperatives	167

Chapter 10	Human Capital Development Towards Greater Agility	
Table 10.1	Core Health and Nutrition Outcome Indicators: Targets vs Accomplishments	173
Table 10.2	Use of Modern Method of Contraception	174
Table 10.3	Core Education Outcome Indicators: Targets vs Accomplishments, 2017-2019	175
Table 10.4	Core Labor Outcome Indicators: Targets vs Accomplishments	177
Figure 10.1	Strategic Framework to Transform Human Capital Development towards Greater Agility	179
Table 10.5	Updated Plan Targets to Improve Health and Nutrition Outcomes for All	180
Table 10.6	Updated Plan Targets to Ensure Lifelong Learning Opportunities for All	189
Table 10.7	Updated Plan Targets to Increase Income-earning Ability and Enhance Adaptability of Filipinos	194
Table 10.8	Legislative Agenda to Transform Human Capital Development towards Greater Agility	199
Chapter 11	Ensuring Food Resiliency and Reducing Vulnerabilities of Filipinos	
Table 11.1	Updated Targets to Ensure Food Resiliency and Reduce Vulnerabilities of Filipinos	207
Figure 11.1	Strategic Framework to Ensure Food Resiliency and Reduce Vulnerabilities of Filipinos	210
Table 11.2	Legislative Agenda to Ensure Food Resiliency and Reduce Vulnerabilities of Filipinos	218
Chapter 12	Building Safe, Resilient, and Sustainable Communities	
Table 12.1	Updated Plan Targets to Build Safe, Resilient, and Sustainable Communities	222

Figure 12.1	Strategic Framework to Build Safe, Resilient, and Sustainable Communities	223
Table 12.2	Legislative Agenda to Build Safe, Resilient, and Sustainable Communities	228
Chapter 13	Reaching for the Demographic Dividend Across All Regions	
Table 13.1	Updated Plan Targets to Reach for the Demographic Dividend	234
Figure 13.1	Strategic Framework to Reach for the Demographic Dividend	236
Table 13.2	Legislative Agenda to Reach for the Demographic Dividend	242
Chapter 14	Vigorously Advancing Science, Technology, and Innovation	
Table 14.1	Updated Plan Targets to Vigorously Advance Science, Technology, and Innovation	247
Figure 14.1	Strategic Framework to Vigorously Advance Science, Technology, and Innovation	249
Table 14.2	Legislative Agenda to Vigorously Advance Science, Technology, and Innovation	259
Chapter 15	Ensuring Sound Macroeconomic Policy	
Table 15.1	Revised Plan Targets to Sustain a Sound, Stable, and Supportive Macroeconomic Environment	268
Figure 15.1	Strategic Framework to Sustain a Sound, Stable, and Supportive Macroeconomic Environment	271
Table 15.2	Updated Legislative Agenda to Sustain a Sound, Stable, and Supportive Macroeconomic Environment	281
Chapter 16	Promoting Competition	
Table 16.1	Updated Plan Targets to Promote Competition	287
Figure 16.1	Strategic Framework to Promote Competition	288
Table 16.2	Legislative Agenda to Promote Competition	292

Chapter 17	Attaining Just and Lasting Peace	
Figure 17.1	Strategic Framework to Attain Just and Lasting Peace	299
Table 17.1	Legislative Agenda to Attain Just and Lasting Peace	305
Chapter 18	Ensuring Security, Public Order, and Safety	
Figure 18.1	Strategic Framework to Ensure Security, Public Order, and Safety	311
Table 18.1	Legislative Agenda to Ensure Security, Public Order, and Safety	319
Chapter 19	Accelerating Infrastructure Development	
Table 19.1	Updated Targets to Accelerate Infrastructure Development	325
Figure 19.1	Strategic Framework to Accelerate Infrastructure Development	328
Table 19.2	Legislative Agenda to Accelerate Infrastructure Development	347
Chapter 20	Ensuring Ecological Integrity, Clean and Healthy Environment	
Table 20.1	Updated Plan Targets to Ensure Ecological Integrity, Clean and Healthy Environment	353
Figure 20.1	Strategic Framework to Ensure Ecological Integrity, Clean and Healthy Environment	355
Table 20.2	Legislative Agenda to Ensure Ecological Integrity, Clean and Healthy Environment	366
Chapter 21	Protecting the Rights, Promoting the Welfare, and Expanding Opportunities for Overseas Filipinos	
Figure 21.1	Overseas Filipino Worker (OFW) Deployment, Land-based, 2011-2019	374
Figure 21.2	OFW Deployment by Destination Country, 2019	375
Table 21.1	Updated Plan Targets to Protect the Rights, Promote the Welfare, and Expand Opportunities for Overseas Filipinos to Contribute to the Country's Development	375

Figure 21.3	Updated Plan Targets to Protect the Rights, Promote the Welfare, and Expand Opportunities for Overseas Filipinos to Contribute to the Country's Development	377
Table 21.2	Legislative Agenda to Protect the Rights, Promote the Welfare, and Expand Opportunities for Overseas Filipinos to Contribute to the Country's Development	382

Foreword



More than four years ago, this administration embarked on a bold campaign to end poverty in the country by the year 2040. Since then, we have implemented major reforms aimed at correcting long-standing institutional issues that hindered our nation's growth. These reforms include the Build, Build, Build Program, the Tax Reform for Acceleration and Inclusion Act, the Rice Tariffication Law, the national ID system, free tertiary education, and universal healthcare, among others.

Our economy has been steadily gaining strength until the COVID-19 pandemic struck. To save our nation, we made the difficult decision to impose life-saving community quarantines that bought us precious time to improve our healthcare capacity. Like other countries, our economy suffered and our people faced serious loss of income and livelihood.

We recognize that, to keep our long-term strategies responsive to our present realities, we need to recalibrate our actions. This Updated Philippine Development Plan 2017-2022 thus reflects our determination to persevere in our goal of ending poverty despite the setbacks caused by the pandemic.

I am therefore directing all government agencies to ensure the efficient and timely implementation of the strategies laid out in this Plan. I have no doubt that we can accomplish these goals and, with the cooperation of the Filipino people, eventually heal, recover and rise as one nation.



RODRIGO ROA DUTERTE

President

Republic of the Philippines

Preface



In 2017, the NEDA Board approved the Philippine Development Plan (PDP) 2017-2022. This was anchored on the government's zero to 10-point socioeconomic agenda and geared towards the achievement of our long-term vision: *Isang matatag, maginhawa, at panatag na buhay para sa lahat*. Over the last three years, we conducted the midterm update of the PDP, building on the achievements from the first half of President Duterte's term.

President Duterte's policy of fiscal prudence and his push for tax reforms enabled us to achieve the highest revenue-to-GDP ratio of 16.1 percent, and the lowest debt-to-GDP ratio of 39.6 percent in 2019. We earned an unprecedented upgrade in our credit rating, which granted us access to more funding sources for our priority programs at concessional rates and favorable terms.

These allowed us to sustainably fund the Build, Build, Build program and provide more and better social services for the people. As a result, both the unemployment and underemployment rates also fell to historic low levels. In other words, we had realized better economic outcomes for the Filipino people.

Earlier in 2018, we achieved a record low poverty rate of 16.7 percent of the population, achieving our target of lifting some six million Filipinos out of poverty four years ahead of schedule. If not for the COVID-19 pandemic, we would have become an upper-middle income country at the end of 2020, two years ahead of our 2022 target.

However, COVID-19 temporarily disrupted our growth momentum and development trajectory. To address this unprecedented crisis and save lives, the government made the difficult decision of imposing community quarantines in order to protect communities from the virus and beef up our healthcare system. This disrupted the majority of our economic activities, leading to loss of income and jobs and temporarily reversing some of our economic gains from the first half of this administration.

Given this, we enhanced the PDP to respond to the challenges brought about by the pandemic. This was a result of public consultations held among key stakeholders. Guided by the *AmBisyon Natin 2040*, the PDP 2017-2022 was formulated to lay down the foundation for inclusive growth, a high-trust and resilient society, and a globally competitive knowledge economy.

Through these, the strategies in the Plan have been organized into a strategic framework containing three main pillars: *Malasakit* (Building a high-trust society), *Pagbabago* (Transforming towards equity and resiliency), and *Patuloy na Pag-unlad* (Increasing growth potential).

Our prospects for recovery are promising. With the roll-out of the COVID-19 vaccines in the Philippines and other countries, the road remains challenging but there is now light at the end of the tunnel. With the productive sectors of the economy strengthened by our fiscal and economic reforms, and by our infrastructure program, we see no reason why the economy cannot bounce back as we safely reopen the economy and implement the strategies in the Plan.

The government is committed to deliver adequate, prudent, and timely policies and responses to help restore income, opportunities, and jobs. The Updated PDP 2017-2022 will lead us back to our vision of a strongly rooted, comfortable, and secure life. We assure the Filipino people we will not waste this crisis. Like before, we will turn this crisis into an opportunity to recover strongly, and collectively build a better normal and a more inclusive society for many years ahead until our *AmBisyon Natin 2040* vision where no one is poor is attained.



KARL KENDRICK T. CHUA
Socioeconomic Planning Secretary

PART I

INTRODUCTION

01 Overview



Overview

The long-term vision remains the same, and has become even more pronounced with the emergence of new threats

Every Filipino aspires to enjoy a “*matatag, maginhawa, at panatag na buhay.*” This is *AmBisyon Natin 2040*. Sensitive to these aspirations, the Duterte administration has embraced the mission to enable and empower every Filipino to achieve his or her *AmBisyon*. The Philippine Development Plan (PDP) 2017-2022 has been formulated to lay down the foundation for inclusive growth, a high-trust and resilient society, and a globally-competitive knowledge economy. This foundation is intended to be strong enough for the next three development plans to build on.

During the first three years, a number of needed reforms have been enacted. The reforms have been game-changing and the desired social and economic outcomes were achieved, even surpassing the targets at times. This primarily stems from the conscious effort to include social protection components as part of the reform program. This was done to cushion the expected adverse though temporary effects, thereby increasing support to the reform.

Almost four years in, the Philippines was on its way to becoming an upper-middle-income country, until the once-in-a-century global pandemic, caused by COVID-19, struck. The immediate response was to save lives by first restricting social and economic activities to limit the spread of the virus, while improving the country's health system capacity.

The health system capacity has since been substantially improved. However, the social and economic restrictions had adverse social and economic consequences. The challenge at hand is to muster, as quick as possible, an economic turnaround. And much depends on being able to manage the risks and transition to the “new normal.”

Even at this time of COVID-19 global pandemic, the country has been benefitting from the reforms enacted and already implemented (e.g., Rice Tariffication Law [RTL Law], Sin Tax Reform Law, Ease of Doing Business and Efficient Government Service Delivery [EODB-EGSD] Act, Tax Reform for Acceleration and Inclusion [TRAIN] Law, Telecommuting Act, Social Security Act of 2018, *Balik Scientist Act*, etc.). A more accelerated timeline concerning the other reforms would have substantially built up the country's resilience (e.g., PhilSys Act, Universal Health Care [UHC] Act, Philippine Innovation Act, entry of a third telecommunications provider, Free Internet in Public Spaces Act [PSA], etc.). This pandemic also lends urgency to crucial reform

initiatives that will encourage strategic industries to locate in the country (e.g., amendments to the Foreign Investments Act [FIA], Public Service Act [PSA], Retail Trade Liberalization Act [RTLA], and the Corporate Recovery and Tax Incentives for Enterprises [CREATE]). Over the immediate term, there is a need to address financial risk that may have worsened because of the mobility restrictions imposed to contain COVID-19. The proposed Financial Institutions Strategic Transfer (FIST) and Government Financial Institutions Unified Initiatives to Distressed Enterprises for Economic Recovery (GUIDE) laws are designed to manage such risks.

We are 20 years away from 2040. While there seems to be ample time to catch up on the targets related to *AmBisyon*, recent developments have shown that social and economic gains can easily be reversed. Hence, together with economic recovery, building resilience is now the urgent and important development objective. Being resilient, after all, is an essential component of the *AmBisyon*: having a secure future (*panatag na buhay*).

Embracing *AmBisyon Natin 2040*

Early into his administration, President Rodrigo Roa Duterte issued Executive Order No. 5, s. 2016 “approving and adopting the twenty five-year long-term vision entitled *AmBisyon Natin 2040* as guide for development planning.”

AmBisyon Natin 2040 represents the collective aspirations of Filipinos to enjoy a “*matatag, maginhawa at panatag na buhay*.” This was the result of various focus group discussions and nationally-representative survey undertaken by the National Economic and Development Authority (NEDA) in early 2016.

AmBisyon Natin 2040 reveals the many dimensions of well-being that Filipinos value the most: strong family and community ties, a comfortable lifestyle, and a secure future. It should then be the mission of government to steer development processes to enable and empower every Filipino to achieve these aspirations.

The same EO adopted the following vision for the Philippines:

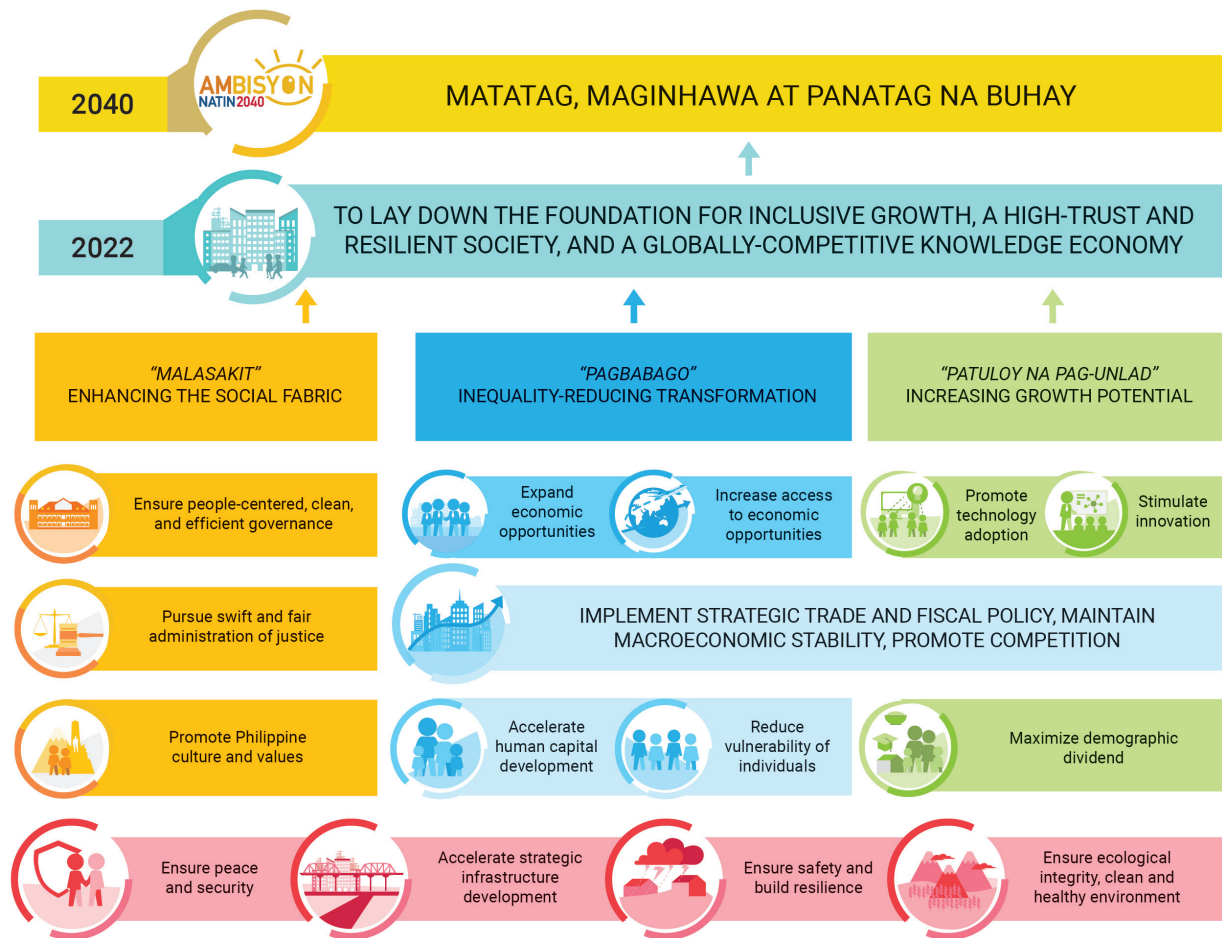
“By 2040, the Philippines shall have been a prosperous, predominantly middle-class society where no one is poor; our peoples live long and healthy lives, are smart and innovative, and live in a high-trust society.”

A Plan with a Vision: The Philippine Development Plan 2017-2022

The strategic framework of the PDP 2017-2022 (Figure 1.1) is guided by *AmBisyon Natin 2040*. The goal is to lay down the foundation for inclusive

growth, a high-trust and resilient society, and a globally-competitive knowledge economy.

Figure 1.1 The PDP Framework



The strategies to achieve this objective are organized under the three major pillars of “*Malasakit*,” “*Pagbabago*,” and “*Patuloy na Pag-unlad*.”

The *Malasakit* pillar is about enhancing the social fabric. The strategies aim to build the foundations for a high-trust society by ensuring a clean, efficient, and people-centered governance; guaranteeing swift and fair administration of justice; and increasing awareness of the different cultures and values across Philippine society.

The *Pagbabago* pillar is about effecting inequality-reducing transformation. It consists of strategies to expand economic opportunities, accelerate human capital development, reduce vulnerability, and build safe and secure communities.

The *Patuloy na Pag-unlad* pillar is about increasing potential growth. It consists of strategies to enhance the factors necessary to accelerate and sustain growth and development through 2040. It is about promoting science, technology, and innovation. It also covers strategies to reap the demographic dividend.

Supporting these pillars are policies and programs to ensure sound macroeconomic fundamentals and promote healthy competition. Furthermore, realizing the importance of rectifying or improving initial conditions that are the foundations for sustainable development, the PDP 2017-2022 contains policies and programs to ensure peace, security, and public order and safety; accelerate infrastructure development; and address environmental concerns.

This PDP also gives deliberate attention to the special circumstances of overseas Filipinos (OFs) and their families, with the aim of empowering them to achieve their aspirations for a “*matatag,*

maginhawa, at panatag na buhay.” Special focus is given to their eventual reintegration and active participation into the country’s development processes.

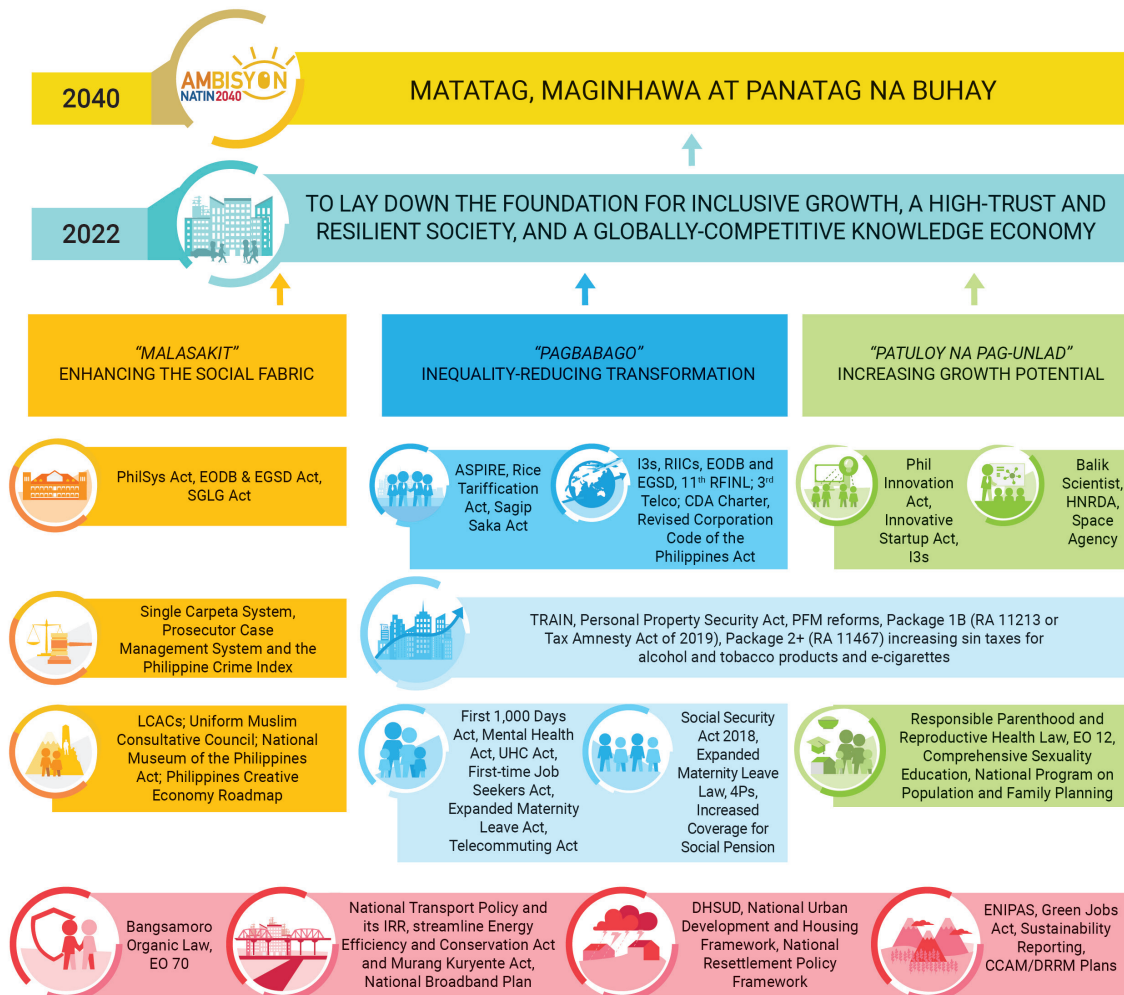
Reforms Instituted

Running on a platform of change, the Duterte administration has introduced a number of much-needed and long-awaited reforms, some of which have been institutionalized through legislation. These game-changing reforms are expected to yield net benefits to society and even provide a robust foundation on which to build resiliency. Some reforms were admittedly radical and were expected to result in short-term negative effects

given initial trade-offs. However, a feature of these reforms is the deliberate inclusion of safety nets to cushion the sectors that might be adversely affected, though temporarily, by the reform.

Figure 1.2 re-draws the strategic framework of the PDP 2017-2022, to indicate major reforms undertaken. This is followed by a discussion of the major reforms that can be used as basis for greater resilience.

Figure 1.2 PDP 2017-2022 Reforms Instituted



The **PhilSys Act** establishes a national digital ID system that will provide every Filipino with proof of identity. This national ID will facilitate transactions in business and with government by providing a credible but easily accessible instrument for “know your customer” protocols. This will also fast-track financial inclusion and facilitate the provision of targeted transfers from government, as the need arises.

The **EODB-EGSD Act**, meanwhile, directs all agencies in government to streamline government processes, particularly those concerning business to government (B2G) and consumers to government (C2G), and rationalize or even harmonize regulations. Under the “new normal,” businesses need to reconfigure processes or change product lines altogether, and these may require a new set of permits. This law requires government to be facilitative so that businesses can quickly undertake the changes and new investments required.

Farmers and fisherfolk are expected to benefit from the **Sagip Saka Act** which provides various forms of assistance to improve (a) production and productivity; (b) access to financing and better technologies; and (c) business support and development services. Access to finance is further increased with the **Agricultural Free Patent Reform Act** which makes agricultural free patents tradable and bankable instruments.

A major reform in the agriculture sector is the **RTL**. This is a long-awaited reform designed to open the market for rice trade. The previous regime of quantitative restrictions on imported rice provided price support to the rice farmers but this made the retail price of rice expensive as a result. Despite the price support, rice farming in the Philippines has been unprofitable, especially when compared to other countries in Asia (Bourdey et. al., 2016). To balance the interests of farmers and those of consumers toward overall efficiency and economic growth, the law (a) replaces the quantitative restrictions on imported rice with tariffs of 35 to 40 percent and (b) establishes the **Rice Competitiveness Enhancement Fund (RCEF)** coming from the tariff revenues. The RCEF consists of an annual

appropriation of PHP10 billion for six years to fund programs on farm mechanization, seed development, propagation and promotion, credit assistance, and extension services, which were specifically identified to improve the productivity of rice farmers, reduce production cost, and link them to the value chain. The excess from the PHP10 billion tariff revenue collection will still be given to rice farmers and appropriated by Congress the following year for the direct financial assistance to rice farmers, titling of agricultural rice lands, expanded crop insurance program, and crop diversification program. The fund provides assistance to rice farmers in the form of farm machinery and equipment, high-yielding seeds, access to affordable credit, and skills training programs on farm mechanization and modern farming techniques. The impact on consumers was evident – the retail price of rice went down by about 9 percent in 2020 from its average in 2018, before the law was enacted. The impact on rice farmers, on the other hand, will require a more extensive impact evaluation. What is clear though, is that the *palay* subsector grew by 7.2 percent during the second quarter of 2020, amid the very strict economic lockdown, from the same period in 2019.

To further facilitate investments, the **Revised Corporation Code of the Philippines** eliminates barriers to entry of both small and large enterprises by permitting the formation of one-person corporations and by allowing stockholders or members to exercise their rights through remote communication and in-absentia voting, among others. As remote communication becomes part of the new normal, this amendment of the Corporation Code will ensure that business meetings and voting can proceed.

As part of human capital development, the **Universal Access to Quality Tertiary Education Act** provides free tuition in state universities and colleges, free technical and vocational education and training, tertiary-education subsidy, and student loans. On the other hand, the **Philippine Qualifications Framework Act** reinforces and strengthens the recognition of knowledge and skills acquired outside the formal education systems through a system of pathways, equivalencies, and

credit transfers. To further increase employability, the **Tulong Trabaho Act** provides free training fees and additional financial aid to qualified beneficiaries enrolling in selected training programs (STPs). These reforms ease the financial burden of acquiring tertiary education, reskilling, and retooling programs, which the workforce will also need to adjust to the new normal.

The **Pantawid Pamilyang Pilipino Act** institutionalizes the *Pantawid Pamilyang Pilipino Program* (4Ps) to reduce the vulnerabilities of children in poor families. The program provides cash transfers to family beneficiaries conditional on health, nutrition, and education outcomes for a maximum of seven years. Other features of the law also provide effective ways of engaging with poor families even for information and communication campaigns, which will be useful to help them adjust to the new normal, among others.

The **UHC Act** aims to provide health care coverage to all Filipinos, when and where needed, without having to bear huge financial burden. It is a package of health care reforms centered around health care financing. Among others, it replaces the fragmented system of health care provision with a network approach. This is to be funded by taxes on tobacco and alcohol.

The **Social Security Act of 2018** strengthens the Social Security System (SSS), which is an important institution in building resilience. It also provides economic support to workers who have been involuntarily displaced.

The creation of the **Department of Human Settlements and Urban Development (DHSUD)** reorients housing policies and programs towards building communities, in addition to building houses. These policies and programs must now consider resiliency and sustainability conditions.

The new normal will definitely require innovative ways of production, socialization, consumption,

governance, etc. Operationalizing these innovations requires an ecosystem covering science, technology, and innovation (STI). Four landmark laws were recently enacted to help establish the ecosystem. These are (a) the **Philippine Innovation Act** which establishes the National Innovation Council (NIC), an inter-agency and multisectoral committee that effectively elevates policy and planning on STI to the highest levels of government; (b) the **Innovative Startup Act** which provides incentives and monetary and operational support to innovative and technology startups to foster an innovative entrepreneurial culture; (c) the **Philippine Space Act** which provides the institutional framework to enable the country to reap the benefits from the development and use of space technologies; and (d) the **Balik Scientist Act** which further encourages Filipino experts, scientists, inventors, and engineers who are currently abroad to share their knowledge and expertise in the country.

The entry of a **third telecommunications player**, meanwhile, will create a more competitive environment to help ensure affordable and reliable internet services in the country. This is expected to accelerate digital transformation. Further reforms in the **PSA** and **FIA** will open the sector more.

The **TRAIN Law** corrects the inequity of the tax system by reducing personal income taxes while broadening the tax base. The resulting increase in revenues allowed for the expansion of infrastructure and social services budget. Various **expenditure management reforms** have also been introduced to address underspending while ensuring the effective and efficient delivery of public services. These reforms were instrumental in improving the country's credit rating to BBB+, the highest rating it has achieved so far. In turn, this has enabled the government to mobilize resources for a massive social assistance package during the COVID-19 pandemic.

The signing and subsequent ratification of the **Bangsamoro Organic Law** marks a historic and

significant milestone in the decades-long struggle for self-governance and peace in Mindanao. This has paved the way for lasting peace, which is an essential pre-condition for building resilience.

The government has embarked on the **Build Build Build (BBB)** program, which is an ambitious infrastructure program that increases spending for infrastructure from 4 percent of gross domestic product (GDP) in 2016, based on actual disbursement, to 5.5 percent in 2021, and 4.3 percent in 2022.

A **National Transport Policy (NTP)**, together with its implementing rules and regulations (IRR), has also been adopted. Among others, the policy prioritizes the movement of people, rather than of vehicles, and provides the basis for offering alternative means of mobility.

In the energy sector, reforms have been enacted to encourage investments and reduce the electricity bills of consumers. To facilitate the processing of investment applications in the energy sector, EO 30, s. 2017 was created. Another law, the **Energy Virtual One-Stop Act**, was created to simplify and speed up permitting processes for new power generation, transmission, and distribution projects. The **Murang Kuryente Act** was enacted in 2019 to help reduce consumers' monthly electricity bills and strengthen consumer welfare protection through the utilization of the government's share from the *Malampaya* Fund to pay for the National Power Corporation's (NPC) stranded contract costs and stranded debts. Furthermore, the **Energy Efficiency and**

Conservation Act establishes a framework for institutionalizing energy efficiency and conservation, and promoting the use of energy-efficient technologies. All these are important in encouraging investments in the new normal which may require more geographically-dispersed areas of production, including home-based production.

The **Free Internet in Public Places Act** aims to provide free, secure, and reliable internet service in public places across the country. Prior to this, the **National Broadband Plan (NBP)** was approved in 2017, which called for the government to also initiate investments in broadband infrastructure to complement private sector efforts in the delivery of universal, fast, reliable broadband internet services towards a digital economy. These are critical initiatives to bridge the digital divide in order to ensure that no one is left behind even while we transition to the new normal.

The current pandemic has demonstrated the link between ecological integrity and human health—from the need for better ventilation and sunlight, to ensuring that human activities do not encroach on animal habitats (as a means of preventing zoonotic diseases). The **Expanded National Integrated Protected Areas System (ENIPAS) Act** expands the coverage of the country's national protected areas (3.1 million hectares), strengthens institutional arrangements for the management of protected areas, and streamlines the process for accessing the **Integrated Protected Area Fund (IPAF)** for additional financial resources and economic opportunities in the sites.

Results Delivered

In addition to the reforms instituted, the Duterte administration has committed to a set of targets that indicate progress towards inclusive growth, a high-trust and resilient society, and a globally-

competitive knowledge economy. Table 1.1 shows the headline outcome indicators, the targets, and the accomplishments during the first three years of the administration.

Table 1.1 PDP 2017-2022 Headline Indicators: Targets vs. Accomplishments, 2017-2019

INDICATOR	BASELINE VALUE (YEAR)	PLAN TARGETS			ACCOMPLISHMENTS		
		2017	2018	2019	2017	2018	2019
GDP (growth rates [g.r.] sustained)	7.1 (2016) ^r	6.5- 7.5	7.0- 8.0	7.0- 8.0	6.9	6.3	6.1
Gross National Income (GNI) per capita (g.r.) increased	4.5 (2015)	4.5	5.0	5.0	5.2	4.3	3.9
Poverty Incidence (% of Population) reduced	23.5 (2015) ^r	-	17.3-19.3	-	N/A	16.7	N/A
Rural Poverty Incidence (%) reduced	34.0 (2015) ^r	-	25.6	-	N/A	24.5	N/A
Subsistence Incidence (%) reduced	9.1 (2015) ^r	-	6.8	-	N/A	5.2	N/A
Food Inflation (%) kept stable	1.7 (2016) ^a	2.0 - 4.0	2.0 - 4.0	2.0 - 4.0	3.2	6.6	1.8
Human Development Index (HDI) improved	0.701 (2015)	Increasing	Increasing	Increasing	0.708	0.711	0.718
Unemployment Rate (%) decreased	5.4 (2016) ^r	5.1-5.4	4.7-5.3	4.3-5.3	5.7	5.3	5.1
Employment Generated increased	n.a. (2016)	900,000-1.1 Mn	900,000-1.1 Mn	900,000-1.1 Mn	-664,000	823,000	1.27 Mn
Youth Unemployment Rate (%) decreased	11.5 (Oct 2016)	11.0	10.4	9.8	11.9	13.3	12.9
Underemployment Rate in areas outside NCR (%) decreased	19.7 (2016)	18.3-20.3	17.8-19.8	17.4-19.4	17.1	17.7	15.1
Global Innovation Index (GII) (rank) improved	74 out of 128 economies (2016)	Increasing	Increasing	Increasing	73 out of 127 economies	73 out of 126 economies	54 out of 129 economies

Note: r – revised; a – adjusted original target set in 2016 will be retained

On accelerating economic growth. GDP grew by 6.9 percent in 2017, well within the target growth rate for the year. Consequently, GNI per capita rose by 5.2 percent on the same year. Beginning 2018, the target was to grow between 7 and 8 percent. However, the country’s GDP growth moderated to 6.3 percent in 2018, and 6.0 percent in 2019. This was due to global headwinds marked by increased tendencies towards protectionism, especially coming from the developed economies. The reenacted budget in 2019 also contributed to the less-than-targeted economic growth.

On improving employment numbers. The Duterte administration has delivered on its promise of improving employment numbers. In 2017, unemployment rate increased, but has since declined. In 2018, unemployment rate is estimated at 5.3 percent; in 2019, it went down further to 5.1 percent, both within target.

The net job loss in 2017 can be explained by the higher school participation rate among the youth aged 15-24 years, resulting from the required additional two years of basic education and further encouraged by the tuition fee assistance

for higher education. This also explains the increase in youth unemployment rate from 11.9 percent in 2017 to 13.3 percent in 2018. This, however, improved to 12.9 percent in 2019.

In 2018, net jobs generated reached almost 900,000. This further increased to 1.27 million in 2019, which is more than the target, as the BBB program implementation gained traction.

Underemployment rate in areas outside the National Capital Region (AONCR) reflected the increase in full-time jobs outside Metro Manila. This remained within target, at 17.1 percent and 15.1 percent in 2017 and 2019, respectively.

On ensuring that economic growth benefits the poor. Food inflation rate remained low in 2017 at 3.2 percent, but escalated to 6.6 percent in 2018 due to the mismanagement of the country's rice supply. Food inflation then dropped to 1.8 percent in 2019, primarily due to the implementation of the RTL.

What would be considered a significant accomplishment of the Duterte administration is the rapid decline in overall and rural poverty incidence beyond targets. Overall poverty incidence declined from 23.5 percent in 2015 to 16.7 percent

in 2018, while rural poverty incidence declined dramatically from 34.0 percent in 2015 to 24.5 percent in 2018.

The reduction in poverty incidence in 2018 was achieved despite the high food inflation. This was because of the higher number of paid jobs generated and a deliberate effort to cushion the poor from the adverse, though temporary, effects of the TRAIN law and infrastructure program. This was done by providing transfers to low-income families (estimated at 10 million) through the Unconditional Cash Transfer (UCT) program, which has been implemented for three years. In addition, the HDI was estimated by the United Nations Development Programme (UNDP) to have increased from 0.699 to 0.712. This marks the first time that the country joined the category of high-level HDI.

From a baseline ranking of 74 (out of 128 economies) in 2016 according to the GII, the country jumped to rank 54 (out of 129 economies) in 2019. The country is considered as among the innovation achievers, having scored above average in most innovation dimensions relative to other lower middle-income countries.

Directive for the Next Two Years: Focus on Recovery and Resilience

Further demonstrating the resolve to enable and empower every Filipino to achieve his or her Ambisyon, the government has implemented two major initiatives: ***Bayanihan to Heal as One (Bayanihan 1)*** and ***Bayanihan to Recover as One (Bayanihan 2)***.

Bayanihan 1 provided funds to address the requirements of COVID-19 for tracing, testing, and treatment while assisting low-income families and returning OFs who were economically displaced because of the quarantine restrictions. Some 17.6 million and 14 million low-income families received the first and second tranches of the

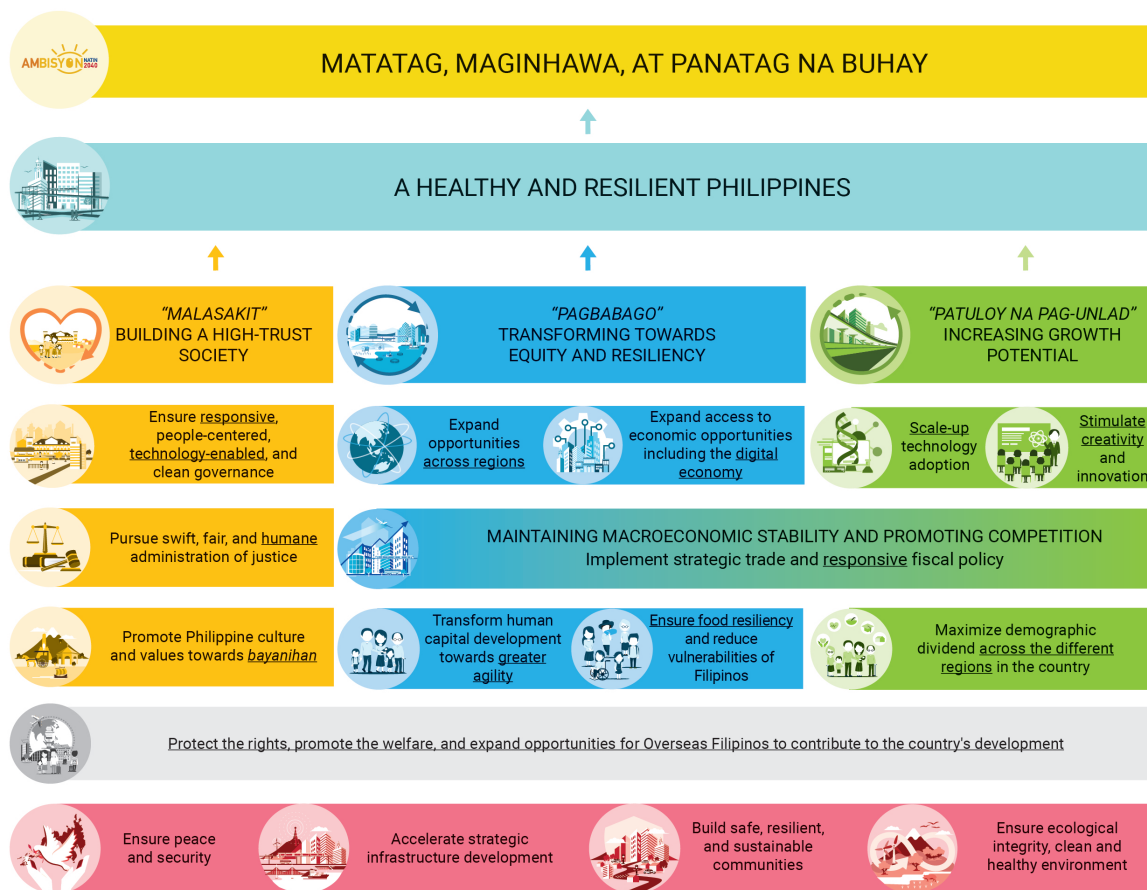
Social Amelioration Program (SAP), respectively. Meanwhile, the Small Business Wage Subsidy (SBWS) program benefitted 2.1 million workers employed by small businesses that were adversely affected by quarantine restrictions.

Bayanihan 2 will sustain the efforts to improve health system capacity, particularly on contact tracing, testing, and isolation protocols. It will also provide financial assistance to the sectors that were adversely affected by the pandemic – transportation, tourism, education, and micro, small, and medium enterprises (MSMEs). Assistance will also be given to the agriculture sector, in the form of credit, farm

inputs, and training, and skills training, particularly on digital skills, to the displaced workers. Both initiatives include provisions to build resilience.

To sustain this, the PDP has been updated to focus its strategies towards having a healthy and resilient Philippines while facilitating economic recovery (see Figure 1.3).

Figure 1.3 Strategic Framework of the Updated PDP 2017-2022



The updated PDP presents a comprehensive environmental scan of the political, economic, social, technological, ecological, and legal dimensions under the new normal (Chapter 2).

The National Spatial Strategy (Chapter 3) is also updated to meet the demands of the new normal.

Moreover, this updated PDP contains five major programs designed to build the resilience of individuals, families, businesses, government, and society under the new normal: (1) health system improvement, (2) food security and resiliency, (3) learning continuity, (4) digital transformation, and (5) regional development through the *Balik Probinsya Bagong Pag-asa Program (BP2)*.

These are integrated into the previous strategies, as will be discussed in Chapter 4.

Health system improvement. The UHC Act provides a comprehensive framework for health system improvement. The reform calls for a paradigm shift in the provision of care, from being fragmented and facility-based, to having a network of care with primary care facilities acting as the gatekeeper. The lessons from the COVID-19 pandemic would then add strengthening of health care outreach services and even home-based care. Health promotion also needs to be a prominent feature of health care. More importantly, there needs to be a careful assessment of the current state of health care promotion and

provision in the country, and a plan and investment program over the medium-term on how to improve it to become better prepared for any future health crisis, which we hope does not come.

Food security and resiliency. Food security is about access to safe and affordable food at all times. Food resiliency is having food security during times of crises or emergencies. During the imposition of the enhanced community quarantine (ECQ), data shows that while 86 percent of farmers were able to continue their agricultural work, only 65 percent were able to sell their produce. On the other hand, people in the cities found it very difficult to access fresh produce. Over the next two years, policies and programs will be guided by a food value chain approach – from farm to plate. In addition to programs to improve agricultural productivity, there will be investments in storage facilities, post-harvest, cold chain, and even technologies that prolong the shelf-life of food. Urban residents also need to attain some level of food sufficiency.

Learning continuity. The big challenge under the new normal is to build 21st century knowledge, skills, and competencies in a way that is safe for learners and teachers as even modern pedagogical approaches are centered around participation, teamwork, and collaboration. Added to this is the problem of the digital divide that, if not addressed, will translate to inequality in access to education and may even worsen inequality in the longer term. Education sector agencies will thus design inclusive mechanisms that deliver quality education. Lifelong learning will remain a priority strategy, but especially focusing on digital skills training.

Digital transformation. Government will accelerate its digital transformation agenda, beginning with the implementation of the National Broadband Plan (NBP) and the Free Wi-Fi program. More government transactions will be enabled using the digital platform. Similarly, there will be technical and financial assistance programs to help businesses, especially MSMEs, to transition towards greater digitalization.

In parallel, government will ensure the safety and security of digital transactions, including digital payments. The framework for consumer protection will also be reviewed to encompass the new normal way of transacting.

Regional development. While this has been the goal of the original PDP, the COVID-19 pandemic has made regional development an urgent matter. We have seen that the virus could be transmitted rapidly in densely-populated areas. This has highlighted the need to have well-ventilated living quarters, workspaces, and public spaces. It is also important to have more green outdoor public spaces.

A major initiative to decongest urban areas is the BP2. The program encourages Metro Manila residents, especially informal settlers, to return to their home provinces. BP2 will provide assistance for transportation expenses, livelihood, housing, and education, among others. Over the medium-term, there will be various investments in infrastructure, agriculture, business, transportation, and access to health care. These investments will reduce inequality in the quality of life across the various regions.

We have also seen the benefits of having well-planned communities where people's places of residence are close to where they work, where there is nearby access to health care facilities and food, and so on. All these underscore a need to review the different Comprehensive Land Use Plans (CLUPs) and local development plans. At the same time, disaster risk reduction and management (DRRM) plans need to be revised to include the occurrence of pandemics in the whole framework.

The BBB program will remain a major strategy for economic recovery. The list of infrastructure flagship projects (IFP) has recently been updated considering the new priorities listed above. The foundational role of infrastructure development in achieving the goal of having a healthy and resilient Philippines is recognized. At the same time, the employment to be generated by the implementation of BBB projects will be instrumental in accelerating economic recovery.

Enact the Remaining Reforms

To ease financial capital constraints resulting from the pandemic

The restrictions on mobility and business operations that were imposed to prevent the spread of COVID-19 while health systems were being improved exacted pressure on the cash flow and financial position of businesses and families. An online survey conducted by NEDA in early April 2020, three weeks into the imposition of ECQ in Luzon and other regions of the country, show that while about two-thirds of businesses did not operate during the ECQ, more than three-fourths continued to pay wages to their pre-ECQ pool of workers. This cash flow problem could negatively affect significant portions of the business sector, as payments to suppliers were being deferred, and ultimately to financial institutions, as loan repayments were being postponed. This could lead to a rise in nonperforming loans and a heightened reluctance of banks to extend credit. If the situation is prolonged, this will delay economic recovery.

Two important pieces of legislation are being proposed to address the aforementioned problem: (a) the FIST bill, which seeks to create special purpose vehicles to help financial institutions offload their COVID-19-induced non-performing assets and (b) the GUIDE, which creates a special investment vehicle that would infuse capital into key enterprises while preserving employment (and talents) therein.

To increase strategic investments, including Foreign Direct Investments (FDIs)

While the accomplishments with respect to social, economic, and environmental outcomes have been impressive, the past three years has

demonstrated that there are limits to the country's infrastructure and investment capacities. Moreover, these limits may be due to restrictive policies that limited the entry of FDIs. Some of these restrictions can be addressed by amending laws or regulations such as the PSA, FIA, and the RTLA.

The CREATE will usher in a more competitive tax and incentive regime for businesses – corporate income tax rate will be reduced (by 10 percentage points [ppts] for small businesses and by 5 ppts for all others). The incentive structure can be nuanced depending on the type of investment, location, and subject to agreed performance targets. CREATE is expected to encourage investments in strategic industries that are especially needed by the country to build resilience.

With respect to infrastructure provision, public-private partnerships (PPP) will remain an option to address infrastructure gaps in various social and economic sectors, while still recovering from the economic shock due to COVID-19.

To ease human capital constraints

In addition to attracting additional external investments, it is important to begin developing the country's knowledge economy. Related to this, the Philippines needs to improve its capacity for intellectual property rights protection. In the next two years, increasing knowledge and improving the knowledge ecosystem to improve health and building resilience should be prioritized to improve education and health outcomes.

To improve governance over the management of resources

As population increases, as the economy grows, and as growth centers expand, there will be greater and competing demand for land resources. A national land use framework needs to be established to define the indicative priorities for land utilization and allocation across residential, infrastructure, agricultural, and protective uses. The framework will also guide efforts, monitor developments related to land use, and evolve policies, regulations, and directions of land use planning processes.

Another critical concern today, which is bound to worsen over the immediate future, is the access to and quality of water supply. The NCR and CALABARZON (Cavite, Laguna Batangas, Rizal, and Quezon) are already under a state of absolute water scarcity; Ilocos Region, Central Luzon, and Bicol Region are under water scarcity; and MIMAROPA (Mindoro, Marinduque, Romblon, and Palawan) and Central Visayas are under water stress. New sources of drinking water need to be developed. Equally important is to institute governance reforms in the sector, where the institutional set-up is weak and fragmented. There is a need to create an apex body that will act as the single lead agency to oversee/coordinate overall policy and project/program implementation. The creation of a Water Regulatory Commission is also proposed to harmonize regulatory practices, processes, and fees in the water sector.

Keeping the Long View

We now realize that twenty years until 2040 is a long time and many challenges may come at any time and place obstacles along the way. COVID-19 may just be one of these. It is important to quickly recover lost ground, ensure sustainability of the gains by building resilience, then get back on track towards *AmBisyon Natin 2040*.

To improve the governance over the environment

The more robust way to address environmental degradation is to effect behavioral change. This becomes even more important as we see the close links between human health and quality of the environment. To this end, NEDA has formulated the Philippine Action Plan for Sustainable Consumption and Production which consists of a package of actions with respect to policy and regulation, research and innovation, infrastructure, and education and promotion. It also encompasses the issues of waste management, sustainable business and lifestyles, and efficient use of resources.

To expand market linkages for MSMEs

As MSMEs are encouraged to innovate and participate in the global market, they need to comply with international quality standards. Currently, the need is to develop the personal protective equipment (PPE) ecosystem to afford the country's health care system a reasonable level of security over the supply of PPEs. Prescribing the country's National Quality Infrastructure covering standardization, metrology, testing analysis, quality management, certification, and accreditation is an important step to gain access to markets, especially global markets. Beyond harmonized rules and procedures, the testing laboratories need to be strategically dispersed across the country to provide MSMEs easy access to the facility.

In the remaining Plan period, the Duterte administration is renewing its commitment to enable and empower every Filipino to enjoy each and every one of his or her aspirations—a *matatag, maginhawa, at panatag na buhay*.

02 Global and Regional Trends and Prospects



Global and Regional Trends and Prospects

While some of the trends identified three years ago remain relevant, the COVID-19 pandemic is expected to exert an unprecedented impact on global and regional developments over the next few years. The Philippines will have to nimbly maneuver through the following health, environmental, economic, social, political, and technological trends as it pursues development towards a healthy and resilient Philippines.

Health and Environmental Trends

The COVID-19 pandemic

Since it was first reported in China in December 2019, confirmed cases of COVID-19, caused by the novel coronavirus SARS-CoV-2, have exceeded 42 million individuals in over 200 countries, leading to over 1.1 million deaths over a period of 11 months.¹ Some estimates, based on serosurveys, indicate that the actual number of infections could be 7 to 27 times larger than the confirmed cases. Similarly, the number of deaths may be double the official estimate.² In any case, early results from seroepidemiologic studies indicate that in most cases, less than 10 percent of the population have been infected with COVID-19, likely far below the level that would confer herd immunity.³

As of late October 2020, a rapid rise in cases and deaths was reported in Europe. More gradual uptick was also observed in Africa, Eastern-Mediterranean, and Western Pacific regions. Declines continued to be reported in the Americas and Southeast Asia, although the incidence of new infections remains

high, and collectively these two regions contribute over half of new cases and deaths observed globally. New cases are driven mainly by France, United Kingdom, Spain, Italy, Russia, Czechia, Germany, Poland, and Netherlands in Europe; United States of America, Brazil, Argentina, Colombia, and Mexico in the Americas; India, Indonesia, and Nepal in Southeast Asia; Iran, Iraq, and Morocco in Eastern Mediterranean; Philippines in the Western Pacific; and South Africa in Africa.⁴

The majority of countries in Africa, Eastern Mediterranean, Europe, and the Americas continue to report community transmission of COVID-19. In contrast, most countries in Southeast Asia and the Western Pacific are reporting only either clusters of cases, sporadic cases, or even no active cases. Only four countries (Bangladesh, Indonesia, Philippines, and Papua New Guinea) in the two regions are still reporting community transmission.

Despite the overall uptrend in cases, incidence of deaths has remained relatively stable, possibly due to better case management. The results of several

¹ World Health Organization (WHO), "Coronavirus Disease (COVID-19)," WHO Website, October 12, 2020.

² The Economist, "The Covid-19 Pandemic is Worse than Official Figures Show," September 26, 2020.

³ WHO, "COVID-19: Serology, Antibodies and Immunity," WHO Website, December 31, 2020.

⁴ WHO, "COVID-19 Weekly Epidemiological Update," WHO Website, October 18, 2020.

clinical trials for other novel and repurposed therapies are expected in the last quarter of 2020 and first quarter of 2021. At the same time, the long-term impact of the disease is still not well understood. To improve detection, World Health Organization is evaluating over 50 diagnostic tests, including several potentially game-changing rapid diagnostic tests.⁵

As of mid-October 2020, there are around 200 candidate vaccines, 44 of which are now undergoing human trials, while 10 have reached Phase 3 trials of safety and efficacy.⁶ Some of the leading trials may report results in the last quarter of 2020.⁷ The Philippines is participating in the WHO Solidarity Vaccine Trials, with 12 hospitals around the country designated as trial sites. Aside from these, the country is also studying results of clinical trials of vaccines from six companies from China, Russia, Australia, and Taiwan.⁸ Phase 3 vaccine clinical trials are set to begin in November 2020⁹ (see Chapters 10, 11, and 14 for additional information).

Global production capacity is estimated at 1 billion doses by end-2020, rising to an estimated 8 billion by end-2021.¹⁰ Other estimates note that while there is a high probability that at least one vaccine will be approved by 2021, it will likely take over a year to produce enough doses for healthcare professionals worldwide, and that it could take at least until 2023 before there are enough doses to cover most of the world population.^{11, 12} An important challenge therefore is ensuring equitable access to vaccines, therapeutics, diagnostics, and other essential products (including personal protective equipment and oxygen). WHO is coordinating

efforts to equitably distribute 2 billion vaccine doses by 2021 to immunize health care workers and the vulnerable.¹³ However, as of late September, less than 7 percent of the USD38 billion total funding needed, has been pledged.

The COVID-19 pandemic is a stark reminder of the rising risks from infectious disease outbreaks. Between 2011 and 2018, WHO tracked 1,483 epidemic events in 172 countries. Climate change, urbanization, and the lack of water and sanitation are all factors that contribute to fast-spreading, catastrophic outbreaks. Antimicrobial Resistance (AMR) also poses a significant and growing threat. The Global Preparedness Monitoring Board had previously warned that the world is not prepared for a fast-moving, virulent respiratory pathogen pandemic. Previous World Bank (WB) and WHO analyses indicate that most countries would need to spend on average between USD1 to 2 per person per year to reach an acceptable level of pandemic preparedness.¹⁴ (*Improvements in the Philippines' health care system are discussed in Chapters 1, 4, and 10*)

Climate change

Human activities are estimated to have resulted in a 1.0 degree Celsius (°C) global warming above pre-industrial levels. If it continues to increase at current rate, the world is expected to be warmer by 1.5°C between 2030 and 2052. In such a scenario, warming of extreme temperatures in many regions; increases in frequency, intensity, and/or amount of heavy precipitation in several regions; and an increase in intensity or frequency of droughts in

⁵ WHO, *ACT-Accelerator Status Report & Plan, September 2020 – December 2021*, WHO Website, September 25, 2020.

⁶ WHO, "Draft landscape of COVID-19 candidate vaccines," WHO Website, October 19, 2020.

⁷ WHO, "COVID-19: Serology, Antibodies and Immunity."

⁸ Department of Science and Technology, "DOST Prepares for WHO Solidarity Trials," Press Release, October 9, 2020.

⁹ Department of Health, "DOST-led Sub-TWG on Vaccine Dev't Gears Up for Vaccine Trials in the Philippines," Press Release, October 10, 2020.

¹⁰ World Bank (WB), "From Containment to Recovery: Economic Update for East Asia and the Pacific, October 2020."

¹¹ Center for Global Development, "COVID-19 Vaccine Predictions: Using Mathematical Modelling and Expert Opinions to Estimate Timelines and Probabilities of Success of COVID-19 Vaccines," *CGD Policy Paper 183*, October 2020.

¹² Stephanie Findlay and Anna Gross, "Not Enough Covid Vaccine for All until 2024, Says Biggest Producer," *Financial Times*, September 14, 2020.

¹³ WHO, *ACT-Accelerator Status Report*.

¹⁴ Global Preparedness Monitoring Board, *A World at Risk: Annual Report on Global Preparedness for Health Emergencies*, World Health Organization, September 19, 2019.

some regions are expected. The number of hot days is projected to increase in most land regions, with highest increases in the tropics.¹⁵

Global emissions are reaching record levels and show no sign of peaking. The last four years have been the hottest on record, and winter temperatures in the Arctic have risen by 3°C since 1990. In effect, sea levels are rising, coral reefs are dying, air is becoming more polluted, and there are more heatwaves and risks to food security.¹⁶

The Intergovernmental Panel on Climate Change (IPCC) projects that global mean sea level will rise to 0.26 meters to 0.77 meters with global warming of 1.5°C by 2100. Sea level will continue to rise well beyond 2100, and the magnitude and rate of this rise depend on future emission pathways.¹⁷

The IPCC also expects that “global warming of 1.5°C will shift many marine species to higher latitudes and worsen the damage to many ecosystems. Furthermore, the loss of coastal resources will increase, while the productivity of fisheries and aquaculture will be reduced. For example, coral reefs are seen to decline by a further 70 percent to 90 percent.”

Countries in the tropics and Southern Hemisphere subtropics are projected to experience the largest impacts on economic growth due to climate change should global warming increase from 1.5°C to 2°C. Indeed, the WB and Climate Analytics have cited the Philippines as one of the countries most vulnerable to climate change with its high exposure to extreme weather events and long coastlines subject to rising sea levels.¹⁸ The Department of Science and Technology-Philippine Atmospheric, Geophysical and Astronomical Services Administration (DOST-PAGASA) reported a warming of an average rate of 0.1°C per decade and will continue to increase in the future. Projection shows that the country will experience an average temperature increase by as much as 0.9°C to 1.9°C in a moderate emission scenario and 1.2°C to 2.3°C in a high emission scenario in 2036 to 2065. By the end of 21st century, this increase could range from 2.5°C to 4.1°C if there is no concerted effort to cut greenhouse gas emissions¹⁹ (see Chapters 3, 18, 19, and 20).

The United Nations (UN) IPCC also projects that risks from some vector-borne diseases, such as malaria and dengue fever, will increase with warming from 1.5°C to 2°C.

Economic Trends

Weaker economic outlook amid COVID-19 and the great lockdown

After relatively weak global growth in the past three years, the International Monetary Fund (IMF) projects that the pandemic and resulting restrictions in economic activities will push the

global economy into a recession in 2020, shrinking by -4.4 percent. After rebounding by 5.2 percent in 2021, global growth is expected to gradually slow down again to about 3.5 percent in the medium-term.²⁰ Most countries in the region are expected to contract, with the notable exception of China. Within the ASEAN-5, only Vietnam is expected to post positive growth. Malaysia and Indonesia’s GDP are expected to recover to pre-pandemic levels by 2021, while Thailand and the Philippines will do so

¹⁵ United Nations Intergovernmental Panel on Climate Change (UN-IPCC), *Special Report: Global Warming of 1.5C*, World Meteorological Organization, Geneva, 2018.

¹⁶ UN, “2019 Climate Action Summit,” United Nations, 2019.

¹⁷ UN-IPCC, *Global Warming of 1.5C*.

¹⁸ Climate Analytics, “Country Profile: Philippines. Decarbonising South and South East Asia,” May 2019.

¹⁹ Philippine Atmospheric, Geophysical, and Astronomical Services Administration, “Climate Change in the Philippines,” DOST-PAGASA, 2018.

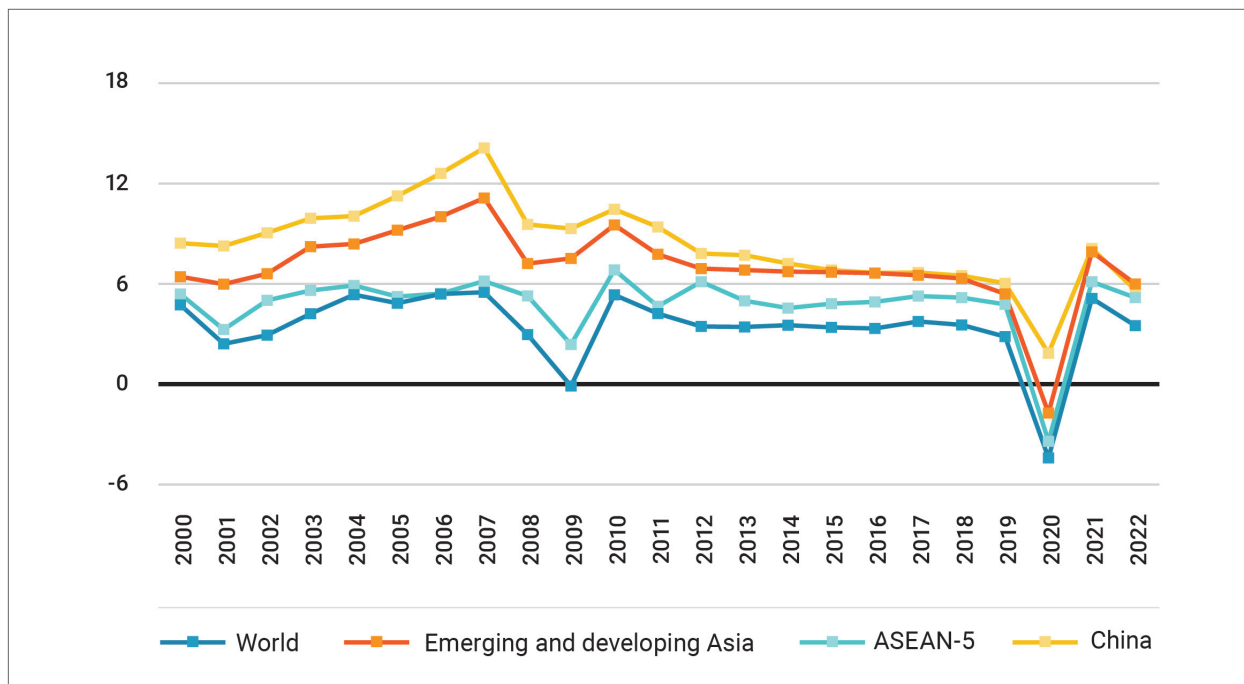
²⁰ IMF, “World Economic Outlook,” October 2020.

only by 2022.²¹ (*The impact of the pandemic on the Philippines' growth prospects are discussed further in Chapter 4*)

While oil prices are expected to pick up after dipping in 2020, the IMF now expects it to remain below USD60 even by 2025, amid subdued aggregate demand. Downside risks abound from the following: multiple waves of COVID-19 pandemic outbreaks, slower than expected recovery as lockdowns are gradually lifted and consumers adapt to 'new normal,' potential financial crises

as governments take on higher fiscal spending/debt and as financial markets diverge from the real economy, destabilizing policy and geopolitical developments (e.g., Brexit, Hong Kong, North Korea, and China-India conflict), trade war escalation and uncertainty, renewed stress towards financially vulnerable countries, and sharper-than-expected slowdown in key economies (i.e., China and European Union [EU]). Upside risks include supply shocks from geopolitical tensions (e.g., Saudi Arabia Oil Tanker Attack).

Figure 2.1 GDP Growth



Source: IMF World Economic Outlook, October 2020

Slower global trade amid shifts in supply chains and rising protectionism

Global trade experienced strong growth in 2017 to 2018 at an average of 4.5 percent growth, before

slowing to less than 1 percent in 2019. However, with the pandemic, the IMF projects that global trade will shrink by 8 percent in 2020, before recovering by 7.9 percent in 2021, and gradually easing to 3.5 percent in the medium-term.²² For the ASEAN-5, the average decline in exports is 7.4 percent in 2020, before recovering by 12.2 percent in 2021. For 2020, a double-digit decline is expected

²¹ The IMF baseline projection assumes that social distancing will continue into 2021 but will subsequently fade over time as vaccine coverage expands and therapies improve. Local transmission is assumed to be brought to low levels everywhere by the end of 2022.

²² IMF, World Economic Outlook database, October 2020, Raw data.

in Indonesia, Malaysia, and the Philippines, with a full recovery expected only by 2022 for Malaysia, Thailand, and the Philippines. Slowing global trade is compounded by weaker external demand, terms-of-trade losses, and supply chain disruptions (e.g., due to production restrictions or border delays). Indeed, the World Trade Organization (WTO) notes that sectors with more complex value chains²³ as well as services trade will be most affected by the COVID-19 pandemic.

The slowdown in trade is happening amidst rising protectionist tendencies over the past decade. Trade restrictions by WTO members have reached historic highs. The stockpile of import restrictions implemented since 2009, and still in force, is estimated to affect around USD1.7 trillion or 8.7 percent of world imports.²⁴ While trade facilitation measures have likewise been introduced, these have been outpaced by restrictive measures.

Given the pandemic, there may be some shifts in supply chains with rising political pressure to re-shore production to reduce perceived vulnerabilities from reliance on foreign producers. Firms may also reconfigure their global production networks to manage the risks of production disruptions better. The pandemic may also induce protectionist measures to shield local firms given weakening local economies or limit exports given domestic needs.

Over a period of seven months to mid-May 2020, WTO members implemented 363 new trade and trade-related measures, 256 of which (about 71%) were linked to the pandemic. Of the pandemic-related measures, 47 facilitated trade and 109 restricted trade. Some of the export restrictions on surgical masks, gloves, medicine, and disinfectant have started to be eased during the latter part of the period though.

The pandemic is also expected to have a sharp and prolonged impact on services trade, particularly on travel and tourism. International travel restrictions, together with consumers' fear of exposure to the virus, are likely to subdue tourism activity. The International Air Transport Association (IATA) projects air transport demand to decline by over 66 percent in 2020, and that it may take some 5 years for passenger demand to return to pre-COVID levels.²⁵ Similarly, the UN World Tourism Organization expects tourism arrival declines of 58 to 78 percent for 2020, with full recovery possibly by 2024.²⁶ (*Strategies to address the impact of the pandemic on Philippines' goods and services trade are discussed in Chapter 9*)

Global investment flows to remain below pre-pandemic levels

After fully recovering and peaking at USD2 trillion in 2015, global foreign direct investment (FDI) has been declining again, reaching USD1.3 trillion in 2018 and USD1.5 trillion in 2019, with the contraction mostly coming from US multinationals repatriating earnings from abroad due to policy-driven tax reforms.²⁷

In contrast, FDI inflows to developing Asia have been broadly steady, with a minimal decline of 5 percent to USD474 billion in 2019.²⁸ For ASEAN-5, FDI inflows actually increased by around 30 percent between 2015 and 2018, exceeding inflows to China in the last three years.

Given the pandemic, UN forecasts that global FDI flows will fall by 40 percent bringing FDI to USD1 trillion in 2020. From there, FDI is projected to further decrease by 5 percent to 10 percent in 2021.

²³ World Trade Organization (WTO), "Trade Set to Plunge as COVID-19 Pandemic Upends Global Economy," Trade Statistics and Outlook, Press Release, April 8, 2020.

²⁴ WTO, *Report to the TPRB from the Director-General on Trade-Related Developments*, July 10, 2020.

²⁵ International Air Transport Association (IATA), "June Data and Revised Air Travel Outlook," July 28, 2020; Brian Pearce, "Downgrade for Global Air Travel Outlook," IATA, September 29, 2020.

²⁶ UN World Tourism Organization, "UNWTO World Tourism Barometer and Statistical Annex, August/September 2020," *UNWTO World Tourism Barometer* 18, no. 5 (2020): 1-36.

²⁷ United Nations Conference on Trade and Development (UNCTAD), "Global Foreign Direct Investment Slides for Third Consecutive Year," June 12, 2019.

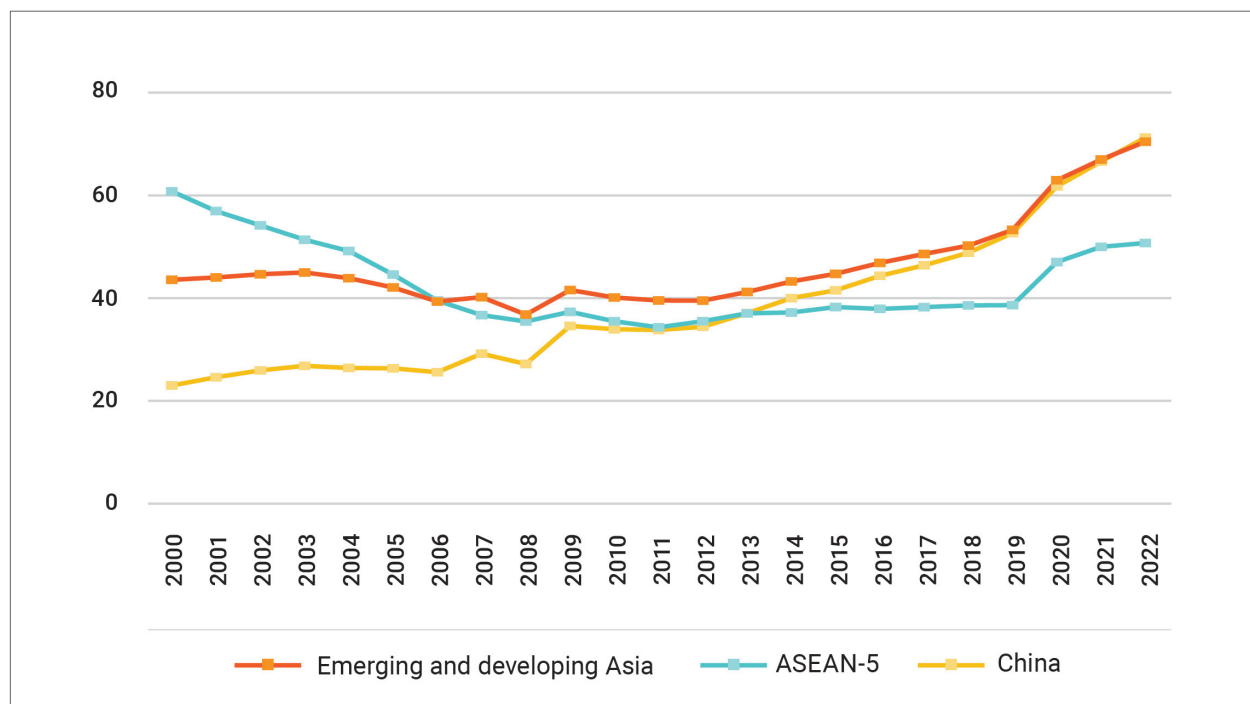
²⁸ UNCTAD, "World Investment Report 2020," June 16, 2020.

Despite a potential initial rebound in 2022, FDI flows are not expected to return to pre-COVID levels. For developing Asia, FDI is projected to fall by 30 percent to 45 percent in 2020. The pandemic is expected to accelerate pre-existing trends towards rationalization of international operations, reshoring, nearshoring, and regionalization.²⁹ (Strategies to address the impact of the pandemic on FDI flows into the Philippines are discussed in Chapter 9)

Sovereign debt levels to rise significantly

As economies slow down, revenue collections are expected to fall. Together with an increase in spending in response to the crisis, the IMF expects budget deficits and sovereign debt-to-GDP ratios to increase over the medium-term. In advanced economies, government debt is projected to rise by about 20 percentage points (ppts) to 124 percent of GDP by the end of 2022. Over the same period, sovereign debt in emerging markets and developing Asia is projected to rise by more than 17 ppts to about 70 percent of GDP. For the ASEAN-5, a 12 ppts increase to over 50 percent of GDP is projected over the period. (Strategies to address the impact of the pandemic on Philippines' fiscal position and public debt are discussed in Chapter 15)

Figure 2.2 General Government Gross Debt (% of GDP)



Source: IMF World Economic Outlook, October 2020

²⁹ UNCTAD, "World Investment Report 2020."

Broad-based monetary easing bias

Over the past three years, central banks across both developed and emerging markets have largely taken an accommodative monetary policy stance given slowing global growth and subdued inflation. Amid the COVID-19 pandemic, countries across the globe are further easing monetary policy to support growth. By some estimates, the US, UK, Japan, and the Euro Area, together, have injected liquidity

worth USD3.8 trillion so far in 2020, helping yields on long-term government debt remain close to zero despite the increased deficit and debt levels.³⁰

In fact, interest rates are projected to fall further. In turn, borrowing rates that stay lower for longer will help cushion the expected increase in debt burdens³¹ as a result of similarly expansive fiscal policy. (*Strategies to address the impact of the pandemic on the Philippines' monetary and financial sectors are discussed in Chapter 15*)

Political Trends

Rising populism, separatism, and geopolitical tensions

The shift away from multilateralism, towards populist and inward-looking policies has gathered steam and may persist over the next three years. This shift has had a substantial impact on international policy discussions in the areas of trade, migration, environment, and security, among others.

In addition, the outcome of the elections in the US is likely to have a significant impact on the direction of its policies. That said, most political analysts expect that tensions between the US and China are likely to persist given their growing rivalry in various fields.

For the UK, an extended period of uncertainty is likely even after Brexit. Apart from the economic fallout from leaving the EU, the UK may face increasing internal pressure from rising separatist sentiments in certain areas. China and India face similar challenges.³²

Moreover, geopolitical tensions are on the rise with North Korea missile talks and disputes over Iran's nuclear program. This has increased global uncertainty, dampened investor and business sentiment, and have consequently clouded the outlook for global growth moving forward. (*Strategies to address the impact of geopolitical tensions are discussed in Chapters 9 and 18*)

³⁰ The Economist, "The Eternal Zero," October 8, 2020.

³¹ Paul Dales and Neil Shearing, "Global State of Play," Capital Economics Webinar, June 11, 2020.

³² Gideon Rachman, "The Coming Surge of Separatism," The Economist (The World in 2020).

Social and Demographic Trends³³

Unemployment is expected to remain elevated

With the contraction in economic activities, the IMF expects unemployment rates to increase and remain elevated over the next three years across both advanced and emerging market economies. In the USA and Euro area, unemployment is projected to rise to 8.9 percent in 2020, before easing to 5.7 percent in 2022 for the USA. For the Euro area, it will increase further to 9.1 percent in 2021 before easing to 8.4 percent in 2022. Unemployment rates in several emerging market economies are projected to increase significantly this year. The main exception seems to be China and Thailand. *(The impact of the pandemic on the Philippines' labor markets are discussed further in Chapter 4. Strategies to address the impact of the pandemic on the Philippines labor markets are discussed in Chapter 10)*

Migration and remittance flows are expected to decline sharply in the medium-term, but long-term factors are likely to persist

The WB projects global remittances to decline by 20 percent in 2020. Remittance flows are expected to fall across all regions, most notably in Europe and Central Asia (27.5%), followed by Sub-Saharan Africa (23.1%), South Asia (22.1%), the Middle East and North Africa (19.6%), Latin America and the Caribbean (19.3%), and East Asia and the Pacific (13.0%). In 2021, WB estimates that remittances to low- and middle-income countries will experience a weak recovery of only 5.6 percent. Despite a sharp decline in remittances early in the lockdown, there are some signs of recovery.

The nearly simultaneous decline in economic activities globally, though, is likely to subdue the counter-cyclical tendency of remittance flows in the short term.

Nonetheless, over the long term, the main drivers of migration – diverging demographic trends and the related wide gap in wages and incomes – are unlikely to change significantly.

International migration has become a major factor of population dynamics. Europe and North America, Australia and New Zealand, and Western Asia have experienced net inflows of international migrants. On the other hand, Central and Southern Asia, Eastern and Southeastern Asia, Latin America, and Sub-Saharan Africa have experienced net outflows of migrants over the past two decades.

The largest outflows are driven by demand for migrant workers (such as from Bangladesh, Nepal, and Philippines) or violence, insecurity, and armed conflict (such as Myanmar, Syria, and Venezuela).

Belarus, Estonia, Germany, Hungary, Italy, Japan, the Russian Federation, Serbia, and Ukraine will experience a net inflow of migrants over the next decade, helping to offset population losses caused by an excess of deaths over births. *(Strategies to address the impact of the pandemic on migrant Filipinos are discussed in Chapter 21)*

³³ United Nations Department of Economic and Social Affairs (UNDESA), *World Population Prospects 2019: Highlights*, June 17, 2019.

Global demographic trends will remain broadly the same³⁴

The UN expects over 47 million women in 114 low- and middle-income countries to lose access to modern contraceptives, some seven million unintended pregnancies are projected to occur if the pandemic-induced lockdowns persist for six months.³⁵ Nevertheless, long-term demographic trends are expected to remain broadly the same despite the pandemic.

The UN projects that global population will increase by 2 billion persons in the next 30 years from 7.7 billion in 2019. However, growth rates vary greatly across regions. Nine countries will make up more than half the projected growth of the global population between now and 2050: India, Nigeria, Pakistan, Congo, Ethiopia, Tanzania, Indonesia, Egypt, and the USA. Around 2027, India is projected to overtake China as the world's most populous country.

Life expectancy at birth for the world's population reached 72.6 years in 2019, an improvement of more than eight years since 1990. Further improvements in survival are projected to result in an average length of life globally of around 77.1 years in 2050.

Global fertility rate fell from 3.2 births per woman in 1990 to 2.5 in 2019. It is projected to decline further to 2.2 in 2050.³⁶ (*Demographic trends in the Philippines are further discussed in Chapters 3, 10, and 13*)

Ageing and shrinking populations in some regions

As a result, the old population is fast increasing. The UN also expects the share of the population who are over the age of 65 is expected to rise from 9 percent in 2019 to 16 percent by 2050. In line with this, working-age population has fallen in proportion, consequently putting pressure on social protection systems (health care, pensions, and social protection).

The speed of population aging is fastest in Eastern and South-Eastern Asia, particularly in South Korea, Singapore, Taiwan, Macao, Thailand, Hong Kong, and Brunei. These countries will experience an increase in the share of the older person by between 16.5 ppts to 23.0 ppts.

Since 2010, 27 countries or areas have experienced a reduction of one percent or more in the size of their populations. Per the UN, this drop is caused by sustained low levels of fertility. The impact of low fertility on population size is reinforced in some locations by high rates of emigration. Between 2019 and 2050, populations are projected to decrease by one percent or more in 55 countries or areas, of which 26 may see a reduction of at least 10 percent. The largest relative reductions in population size over that period, with losses of around 20 percent or more, are expected in Lithuania, Bulgaria, Latvia, the Wallis and Futuna Islands, and Ukraine.

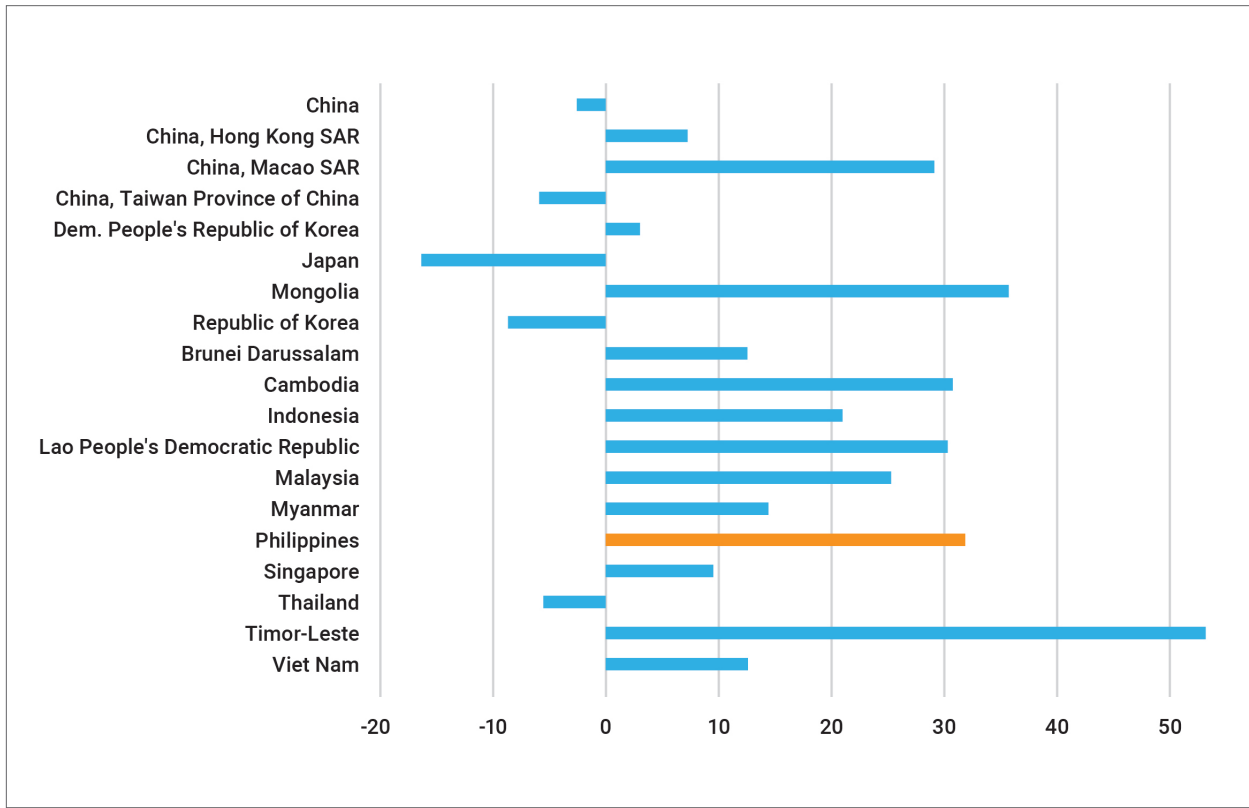
Countries in the region that will see significant declines in population between 2020 and 2050 are Japan (-16%), South Korea (-9%), Taiwan (-6%), Thailand (-6%), and China (-3%). In contrast, all ASEAN member states, except Thailand, will have increases in population led by the Philippines (32%), followed by Cambodia and Lao People's Democratic Republic (at about 30%).

³⁴ UNDESA, *World Population Prospects*.

³⁵ United Nations Population Fund (UNFPA), *Impact of the COVID-19 Pandemic on Family Planning and Ending Gender-based Violence, Female Genital Mutilation and Child Marriage*, UNFPA, April 2020.

³⁶ Fertility level of 2.1 births per woman is needed to ensure replacement of generations and avoid population decline over the long run in the absence of migration.

Figure 2.3 Change in Population (%), 2020-2050



Source: UNDESA

Demographic window is opening for some regions

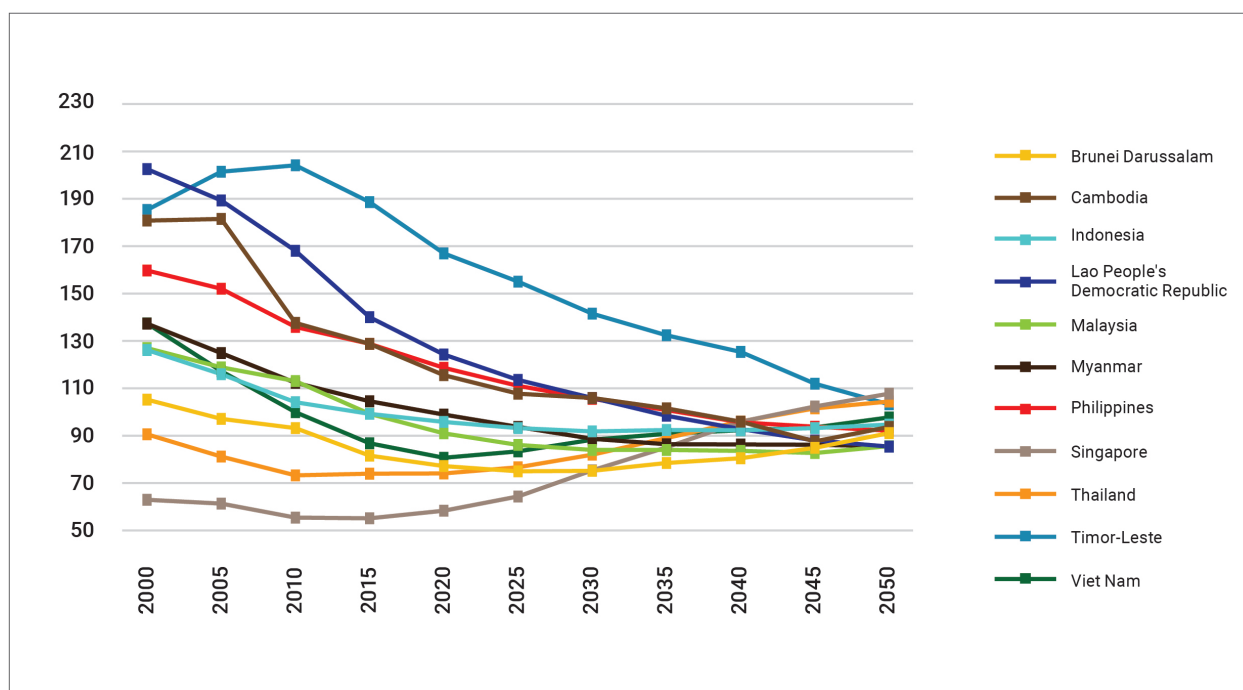
In most of sub-Saharan Africa, and in parts of Asia and Latin America and the Caribbean, recent reductions in fertility have caused the number of the working age group (25-64 years) to grow faster than the rest.

In Southeast Asia (SEA), UN Department of Economic and Social Affairs (UNDESA) projections³⁷ indicate that the share of working-age population in Brunei, Singapore, Thailand, and Vietnam will drop between 2020 and 2050. For the rest of SEA, including the Philippines, it is expected to increase. Consequently, the total dependency ratios³⁸ for Brunei, Singapore, Thailand, and Vietnam will increase, while it is expected to decline in the rest of SEA, including the Philippines, for the same period. (*Strategies to take advantage of the Philippines' demographic window are discussed in Chapter 13*)

³⁷ UNDESA, *World Population Prospects 2019*, Custom data.

³⁸ Ratio of population aged 0-24 and 65+ per 100 population aged 25-64.

Figure 2.4 Total Dependency Ratio



Total Dependency Ratio ((Age 0-24 + Age 65+) / Age 25-64) De facto population as of July 1 of the year indicated.

Source: UNDESA

Progress in reducing global poverty will be delayed

The WB expects that the pandemic will push 88 to 115 million people into extreme poverty or those living below or on less than USD1.90 a day in 2020, or a rise in global extreme poverty incidence to between 9.1 percent to 9.4 percent in 2020, from 8.4 percent in 2019. Most of the additional extreme poor will come from South Asia (49 to 56 million people) and Sub-Saharan Africa (26 to 40 million people). The bulk will come from middle-income countries (72 to 94 million people). Many of the new poor are likely to be engaged as paid employees in informal services, construction, and manufacturing, live in urban areas, with better access to infrastructure, and more educated than the chronic poor.

For 2021, global extreme poverty rate is expected between 8.9 percent and 9.4 percent – a return to the 2017 global poverty rate. This means that the world could lose some three to four years in the fight against poverty. Over the longer term, even if per capita income growth returns to pre-COVID rates, extreme poverty is projected to decline to 6.7 percent by 2030, more than twice the target of 3.0 percent.³⁹ (*The impact of the pandemic on the Philippines' fight against poverty are discussed further in Chapter 4. Strategies to address the impact of the pandemic on poverty in the Philippines are discussed in Chapters 5, 8, 10, 11, and 12*)

³⁹ WB, "Poverty and Shared Prosperity 2020," October 15, 2020.

Technological Trends

Technologies for the next production revolution^{40,41}

Technological developments have been catered towards solving global concerns such as slowing productivity growth, ageing populations, climate change, globalization, and adapting to the ‘new normal.’ However, the speed and uncertainty of technological change present a challenge to governments in terms of oversight to prevent inappropriate applications.

Artificial Intelligence (AI): In the pharmaceutical industry, AI is expected to become the “primary-drug discovery tool” by 2027. It has likewise improved the affordability of certain medical procedures such as genome sequencing and disease detection – indeed, the National Human Genome Research Institute estimates that as many as two billion people will have their genome sequenced by 2025.⁴²

AI is already being used in industrial settings to identify and recommend solutions to production problems, operate autonomous machines, design buildings, discover new materials, and predict maintenance needs. It is also being used for real-time fleet-management, optimizing energy consumption, digital security, office task automation, and workforce training.

Blockchain: While its potential applications could be transformative, blockchain remains an immature technology. Challenges include the need for fundamental changes in business practices, and slower transaction speeds. Nevertheless, “blockchain as a service” is already being offered by a few firms. Blockchain technology has made advancements in the financial sector with the establishment of cryptocurrencies and financial technology (fintech). China, in particular, is seen to take the lead in digital

cash payments with companies such as Alibaba and Tencent dominating the field. Indeed, with the COVID-19 pandemic and the ensuing ‘new normal,’ e-commerce and contactless digital transactions are expected to become the norm.

Additive manufacturing: 3D printing is rapidly expanding, with falling prices for printers and materials, quality improvements and other innovations. Recent innovations include 3D printing with novel materials, such as glass, biological cells, and even liquids (using nanoparticles); robot-arm printheads that allow printing objects larger than the printer itself (opening the way for automated construction); touchless manipulation of print particles with ultrasound (allowing printing electronic components sensitive to static electricity); and hybrid 3D printers, combining additive manufacturing with computer-controlled machining and milling. Research is also advancing on 3D printing, with materials programmed to change shape after printing. Most 3D printing is used to make prototypes, models, and tools. Currently, 3D printing is not cost-competitive at volume with traditional mass-production technologies, such as plastic injection moulding. The costs of switching from traditional mass-production technologies to 3D printing are expected to decline in the coming years as production volumes grow.

Green technology: Amidst concerns of climate change and diminishing resources, green technology has also been on the rise. Among the advancements made are bio-refineries (aimed at reducing greenhouse gas emissions), industrial biotechnology, and bioeconomy (production of goods from renewable biomass/synthetic biology such as biofuels and artificial photosynthesis), gene-editing technologies, synthetic biology, and electric vehicles. Indeed, major car companies such as Volkswagen and Volvo aim to be all-electric by 2021 to 2026.⁴³

⁴⁰ Organisation for Economic Co-operation and Development (OECD), *Science, Technology and Innovation Outlook 2018* (Paris, OECD Publishing, 2018).

⁴¹ The Economist, “Of Anniversaries and Climate Change, 2019 in Review: Science and Technology,” December 29, 2019.

⁴² John Thornhill, “Three Technological Trends That Will Shape the Decade,” *Financial Times*, January 6, 2020.

⁴³ Ed Oswald, “Welcome to the 2020s. Here’s the Tech That Will Shape the Next Decade,” *Digital Trends*, January 1, 2020.

New materials: Materials with entirely novel properties are emerging: solids with densities comparable to the density of air; super-strong lightweight composites; materials that remember their shape, repair themselves, or assemble themselves into components; and materials that respond to light and sound, are now realities.

Nanotechnology: Advanced nanomaterials are increasingly used in manufacturing high-tech products (e.g., to polish optical components). Recent innovations include nano-enabled artificial tissue, biomimetic solar cells, and lab-on-a-chip diagnostics.

High Performance Computing (HPC): This involves computing performance far beyond that of general-purpose computers. It is increasingly important to firms in industries ranging from construction to pharmaceuticals, the automotive sector, and aerospace. Small and medium-sized enterprises (SMEs) could potentially use HPC for prototyping, testing, and design.

5G Networks: Statista forecasts that 5G mobile network will have reached 40 percent of the global population – further enhancing the internet of things (IoT) and general technological connectivity and efficiency. Likewise, there is a need for further improvements in internet and connectivity capacity as the workplace and schools shift towards remote services and education.

Space Travel and Tourism: Several space missions were launched in 2020. Despite the pandemic, the USA, China, and United Arab Emirates (UAE) managed to launch their respective missions to Mars in July. On the other hand, Europe's Mars mission has been pushed back by two years.⁴⁴ Likewise, commercial suborbital flights planned this year were delayed to at least 2021 given the pandemic.^{45, 46}

Digital technology in the New Normal: The nature of COVID-19 has brought about the need for social distancing, contactless procedures, as well as work and study from home arrangements in light of the new normal. Across the world, economies are shifting towards online shopping, digital banking, e-governance, telehealth and contact-tracing applications, remote learning, and virtual meetings.

That said, such technological advancements carry underlying risks particularly for privacy, infrastructure, and employment. Labor concerns have been raised with the advent of automation. Indeed, McKinsey sees automation displacing jobs by as early as the 2030s.⁴⁷ Likewise, greater connectivity because of IoT and 5G ubiquity, as well as shift towards new normal digital services, raise concerns of reduced privacy, increased surveillance, and cybersecurity. This is a particular concern for contact-tracing applications and increased online financial transactions (*Strategies for the Philippines to take advantage of technological advancements are discussed in Chapters 5, 6, 7, 8, 9, 10, 11, 14, 19, and 20*).

⁴⁴ Kenneth Chang, "NASA Launches Perseverance Rover, Capping Summer of Missions to Mars," *The New York Times*, July 30, 2020.

⁴⁵ Justin Bachman, "Virgin Galactic Delays Key Flight," *Bloomberg*, August 4, 2020.

⁴⁶ Christian Davenport, "Jeff Bezos's Secretive Space Venture Launches a Rocket to the Edge of Space for the First Time in Months," *The Washington Post*, October 14, 2020.

⁴⁷ Peter Gumbel, Interview with Michael Chui and Susan Lund, "How Will Automation Affect Jobs, Skills, and Wages?" *New World of Work*, Podcast transcript, McKinsey Global Institute. March 23, 2018.

03

Overlay of Economic Growth, Demographic Trends, and Physical Characteristics



Overlay of Economic Growth, Demographic Trends, and Physical Characteristics

The Philippine Development Plan (PDP) 2017-2022 incorporates a national spatial strategy (NSS) that sets the direction of the physical development of the country. It promotes sustainable human settlements development, access to social services, integration of leading and lagging regions, and building resilience. The health risk brought about by the COVID-19 pandemic has given prominence to the need to improve living standards in cities and promote regional development, ensure connectivity and safe mobility, and manage disaster risks—which are addressed to a large extent by the NSS. As a planning framework, the NSS is complemented by more detailed sectoral plans such as those for transport and other infrastructure, as well as master plans for specific metropolitan areas.

The complexity of development problems, policy agenda-setting, current institutional setups, and financial resource availability and allocation are major challenges that need to be addressed. It is crucial that each government entity understands and seriously takes on its role, with technical, managerial, and financial assistance from development partners, in implementing the NSS to enable all Filipinos to enjoy comfortable and secure lives wherever they choose to locate.

Supporting regional agglomeration. The NSS seeks to decongest the National Capital Region (NCR) and direct growth to regional centers where high growth potentials have greater chances of being realized sooner. In urban areas where population and enterprises concentrate, the NSS will support agglomeration by making cities livable and efficient. Strategies will thus aim to expand and improve social services, fast-track investments in transportation infrastructure, and promote “smart city” principles in urban development.

The COVID-19 pandemic has also amplified other vulnerabilities of the current geospatial structure of cities. We have seen the dangers of high population density, poor air quality, and lack of green spaces. During the lockdown, people in the cities have become food-vulnerable, largely because of difficulty in access to food. These additional considerations will be factored in enhancing the NSS.

Increasing connectivity. Increasing connectivity between production areas and market centers, and providing the missing links for municipal/city, provincial, and national road networks are some of the goals under the NSS. The approved National Transport Policy (NTP), which envisions a Philippine transport system that is “safe, secure, reliable, efficient, integrated, intermodal, affordable, cost-effective, environmentally sustainable, and people-oriented,” will be an important instrument in achieving this goal. The subsequent formulation of a transport system master plan will guide the rational development of an intermodal transport network in the country.

Reducing vulnerability. Considering the climate change projections and threats of geologic hazard events, as well as public health emergencies, the government will continue to invest in disaster risk reduction (DRR) and climate change adaptation (CCA) initiatives to reduce vulnerability to multiple hazards. Recent disaster and risk information generated by science agencies and the evaluation of COVID-19 response will lay the groundwork for institutional and community-level resilience for prospective optimality of result.

In the remaining years of the implementation of the updated PDP 2017-2022, the government will continue to pursue the NSS to promote inclusive and sustainable growth, and enable Filipinos to live comfortable lives wherever they choose to locate.

Economic and Demographic Trends

The population size and distribution determine the magnitude and structure of an economy. This can result in varying concentrations of production and consumption in cities and municipalities, and in their respective regions. For the Philippines, the noticeable trends are as follows:

- Total population continues to increase. While the overall growth rate is decreasing, population will remain high given the large base population of the country.
- NCR has the highest share in gross domestic product (GDP), but its growth is slower compared to some other regions.
- Most regions with larger population also have larger gross regional domestic product (GRDP), with few exceptions. The cities or group of cities within these regions contribute largely to the regions’ population size and economic development.

These imply that certain locations tend to generate more economic activities as they attract establishments and people looking for opportunities. Thus, economic growth also tends to be concentrated in few locations, leaving other areas behind. Yet, growth in urban areas can also cause pollution and congestion, as seen in NCR despite the slowdown in its population growth in recent years.

Regional shares

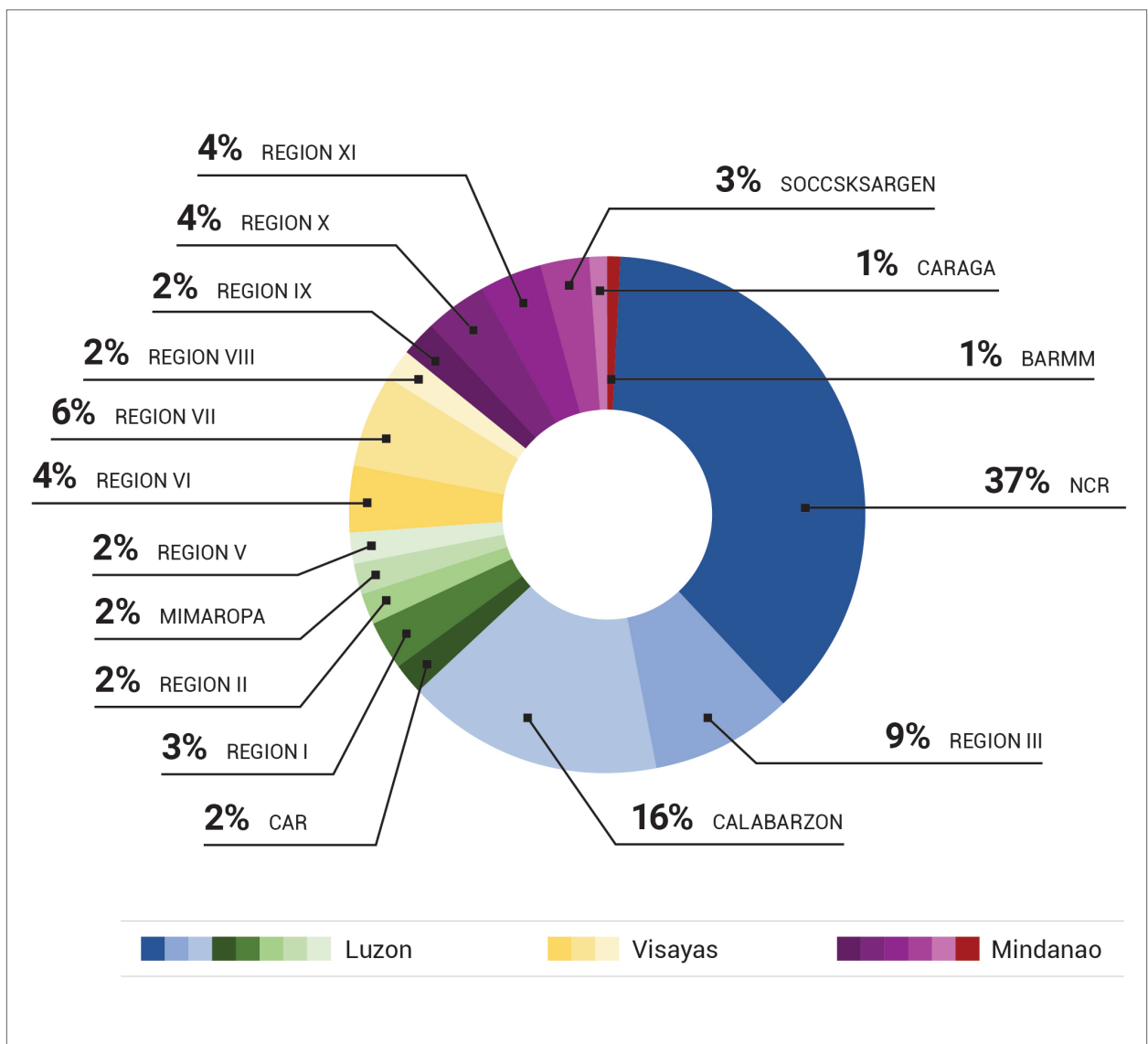
Accounting for 37 percent of GDP from 2010 to 2018, NCR had the highest average regional share in the national economy for the same period; CALABARZON had the second largest share with 16 percent, followed by Central Luzon with 9 percent. These regions account for 62 percent

of the GDP while the rest of Luzon, Visayas, and Mindanao contributed 11 percent, 12 percent, and 15 percent, respectively.

Central Visayas, which posted an average growth rate of 7.8 percent from 2010 to 2018, was the fastest-growing economy among the 17 regions. This was followed by Central Luzon and Davao Region which both grew at an average of 7.7 percent.

Caraga Region and NCR also grew higher than the 6.3 percent national average, at 6.8 percent and 6.4 percent, respectively. The slowest growth rates were observed in MIMAROPA (3.8%), Bangsamoro Autonomous Region in Muslim Mindanao (BARMM) (3.1%), and Eastern Visayas (2.7%).

Figure 3.1 Average Regional Share in GDP, 2010-2018



Source: Philippine Statistics Authority (PSA)

Table 3.1 GRDP Growth Rate, 2010-2018

REGION	GRDP GROWTH RATE									Average 2010- 2018
	2010	2011	2012	2013	2014	2015	2016	2017	2018	
Philippines	7.6	3.7	6.7	7.1	6.2	5.9	6.9	6.7	6.2	6.3
NCR	7.4	3.2	7.0	9.1	5.9	6.6	7.4	6.2	4.8	6.4
Cordillera Administrative Region (CAR)	6.5	1.3	(2.9)	5.4	3.3	3.7	2.3	12.2	7.3	4.3
I (Ilocos Region)	6.8	2.5	7.2	7.0	6.4	5.0	8.5	5.8	6.5	6.2
II (Cagayan Valley)	(0.8)	5.7	7.2	6.6	7.2	3.7	3.8	7.1	3.3	4.9
III (Central Luzon)	10.0	7.1	7.2	4.5	9.3	5.3	9.5	9.2	7.1	7.7
CALABARZON	11.7	1.6	7.0	6.6	5.1	5.9	4.8	6.7	7.3	6.3
MIMAROPA	(0.3)	3.1	4.1	1.3	8.3	1.7	2.6	5.2	8.6	3.8
V (Bicol Region)	3.5	1.9	8.8	8.2	4.3	8.4	5.5	5.0	8.9	6.1
VI (Western Visayas)	4.5	6.2	7.0	3.4	5.2	8.3	5.9	8.6	6.1	6.1
VII (Central Visayas)	12.9	6.8	9.4	7.4	7.8	4.8	8.6	5.2	7.6	7.8
VIII (Eastern Visayas)	3.0	2.1	(6.8)	4.6	(2.4)	3.9	12.0	1.8	5.9	2.7
IX (Zamboanga Peninsula)	1.4	0.1	12.4	4.2	6.6	7.2	4.6	2.4	6.3	5.0
X (Northern Mindanao)	6.5	5.8	6.5	5.4	7.1	5.5	7.5	5.8	7.0	6.3
XI (Davao Region)	5.6	3.7	7.0	6.7	9.3	7.9	9.5	10.7	8.6	7.7
SOCCKSARGEN	2.2	5.3	7.3	8.4	6.2	3.3	4.9	8.3	6.9	5.9
Caraga	10.7	8.5	11.5	8.2	9.4	4.2	2.0	3.6	3.2	6.8
BARMM	6.7	(0.3)	0.0	3.8	3.0	(0.8)	0.4	7.5	7.2	3.1

Source: PSA

Real per capita GRDP

NCR had the highest per capita GRDP in 2018 at PHP253,893, which was nearly thrice the national average of PHP86,370. It increased by 8 percent from PHP232,739 in 2016. CALABARZON and CAR have also posted per capita GRDP higher than the national average, with PHP104,708 and PHP87,722, respectively. On the other hand, BARMM had the lowest real per capita GRDP among the regions in 2018 with only PHP14,657, a slight increase from

2016 (PHP13,366). Following BARMM, Bicol Region and Caraga Region posted the lowest real per capita GRDP in 2018 with PHP29,369 and PHP36,651, respectively. The three lowest-ranking regions have consistently fared poorly in terms of per capita GRDP. This indicates that inequality in per capita GRDP across regions persists over time. As such, the government has been increasing efforts in pushing for policies that will improve the socioeconomic conditions in lagging regions.

Table 3.2 Per capita GRDP, 2010-2018

REGION	2010	2011	2012	2013	2014	2015	2016	2017	2018
NCR	171,442	173,975	181,748	195,070	202,904	218,987	232,739	244,589	253,893
CAR	74,107	73,945	70,156	72,759	73,971	75,048	75,401	83,153	87,722
I	37,819	38,287	40,325	42,588	44,894	46,180	49,474	51,703	54,434
II	30,851	32,167	33,816	35,462	37,645	38,436	39,344	41,571	42,387
III	50,207	52,766	55,163	56,528	60,670	63,641	68,634	73,863	78,016
CALABARZON	79,699	78,966	81,562	84,687	86,644	92,184	94,811	99,346	104,708
MIMAROPA	37,002	37,540	38,239	38,138	40,706	39,575	39,837	41,069	43,715
V	21,004	21,112	22,502	24,005	24,719	25,770	26,686	27,487	29,369
VI	31,927	33,499	35,139	35,874	37,289	39,653	41,420	44,368	46,440
VII	49,966	52,528	56,061	59,211	62,743	64,846	69,322	71,743	76,024
VIII	36,694	37,006	33,850	34,952	33,771	33,771	37,144	37,121	38,598
IX	34,245	33,726	37,077	37,991	39,887	41,873	43,043	43,326	45,265
X	48,940	50,838	52,842	54,678	57,609	60,290	63,771	66,408	70,000
XI	48,487	49,431	51,657	54,188	58,256	61,335	65,913	71,621	76,378
SOCCKSARGEN	36,688	37,813	39,417	41,814	43,493	44,178	45,459	48,277	50,644
Caraga	26,504	28,362	30,985	33,037	35,672	35,553	35,679	36,235	36,651
BARMM	14,588	14,348	14,052	14,380	14,613	13,646	13,366	14,012	14,657

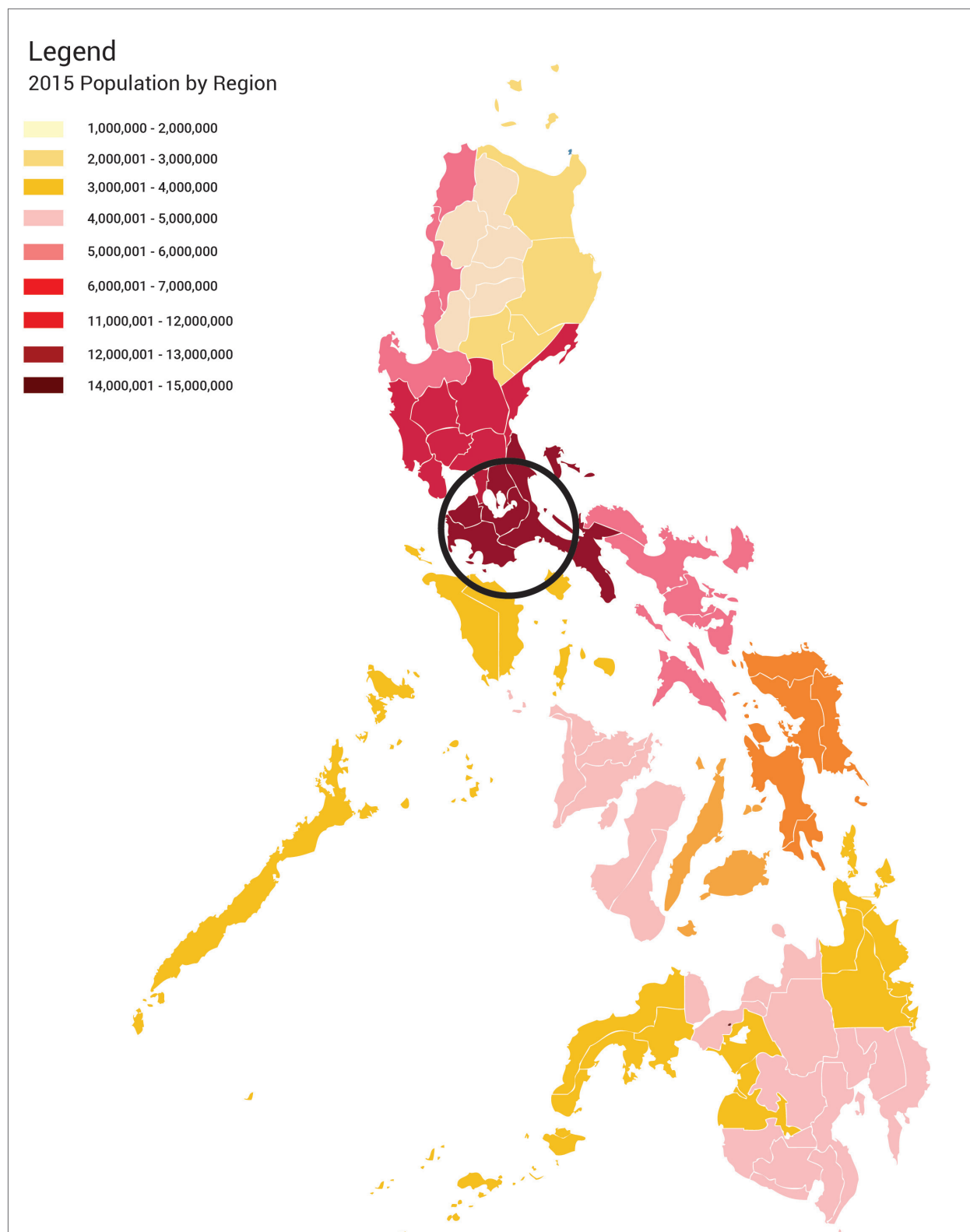
Source: PSA

Human Development Index (HDI)

The Philippines' HDI, a measure of average achievement in key dimensions of human development (health, education, and standard of living), increased from 0.693 in 2015 to 0.712 in 2018. The Philippines ranked 106th out of 189 countries, an improvement from its rank of 115th in 2015. There is no available HDI estimates by region

in 2018. Using the regional estimates based on 2015 and 2017 data, NCR recorded the highest HDI in 2015 with 0.750 and even improving in 2017 with 0.759. Other regions with HDI values higher than the country's HDI were CALABARZON (0.724), CAR (0.722), Central Luzon (0.712), and Ilocos Region (0.705). BARMM had the lowest HDI value at 0.583. These results point to the need to improve and equalize access to basic services to improve the quality of life across regions.

Figure 3.2 Population by Region, 2015



Source: PSA

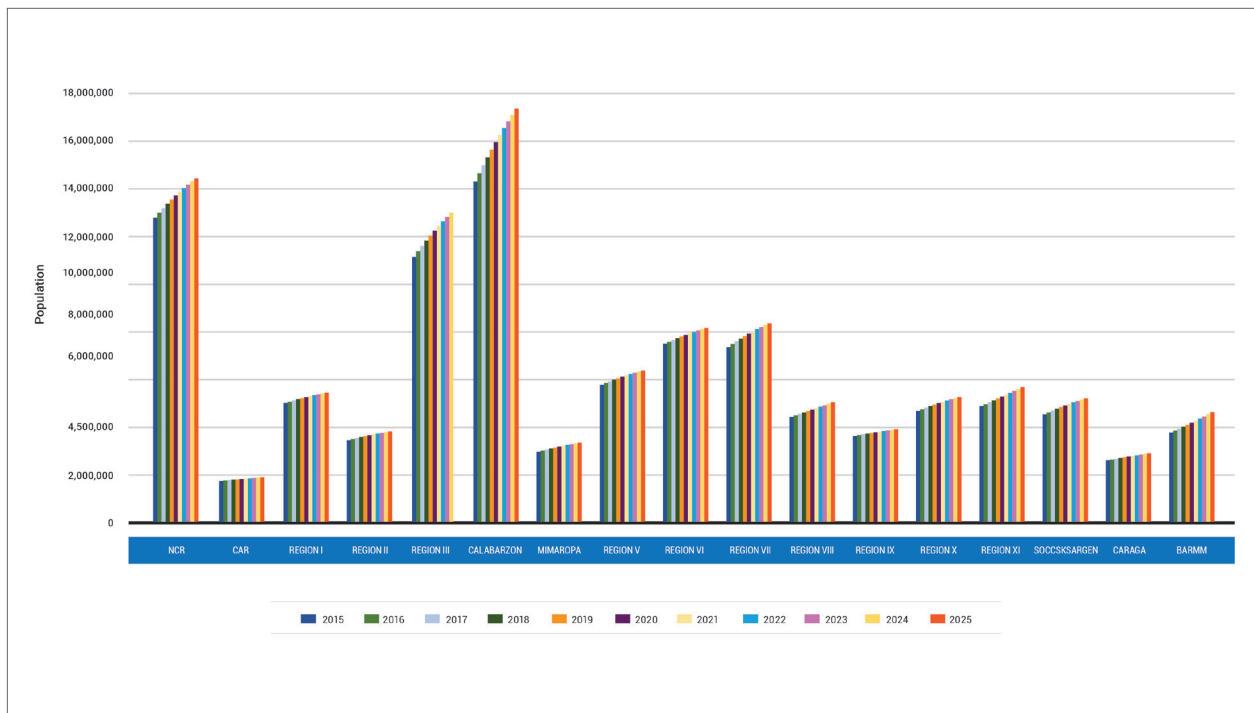
Population trends

Based on the 2015 Census of Population, the country's population was 100,979,303. This is expected to increase to 115 million by 2025 despite the projected slowdown in average annual population growth rate from 1.73 percent (2010-2015) to 1.41 percent (2020-2025). By region, CALABARZON had the largest population with 14.4 million, followed by NCR (12.9 million), Central Luzon (11.2 million), and Western Visayas

(7.5 million). CAR was the least populated region with a total population of 1.7 million. Other less populated regions were MIMAROPA (3 million) and Caraga (2.6 million).

Projections show that CALABARZON will still have the largest population with 17.5 million in 2025, followed by NCR (14.5 million), and Central Luzon (13.2 million). CAR will remain as the least populated region with 1.9 million by 2025.

Figure 3.3 Regional Projected Population, 2015-2025

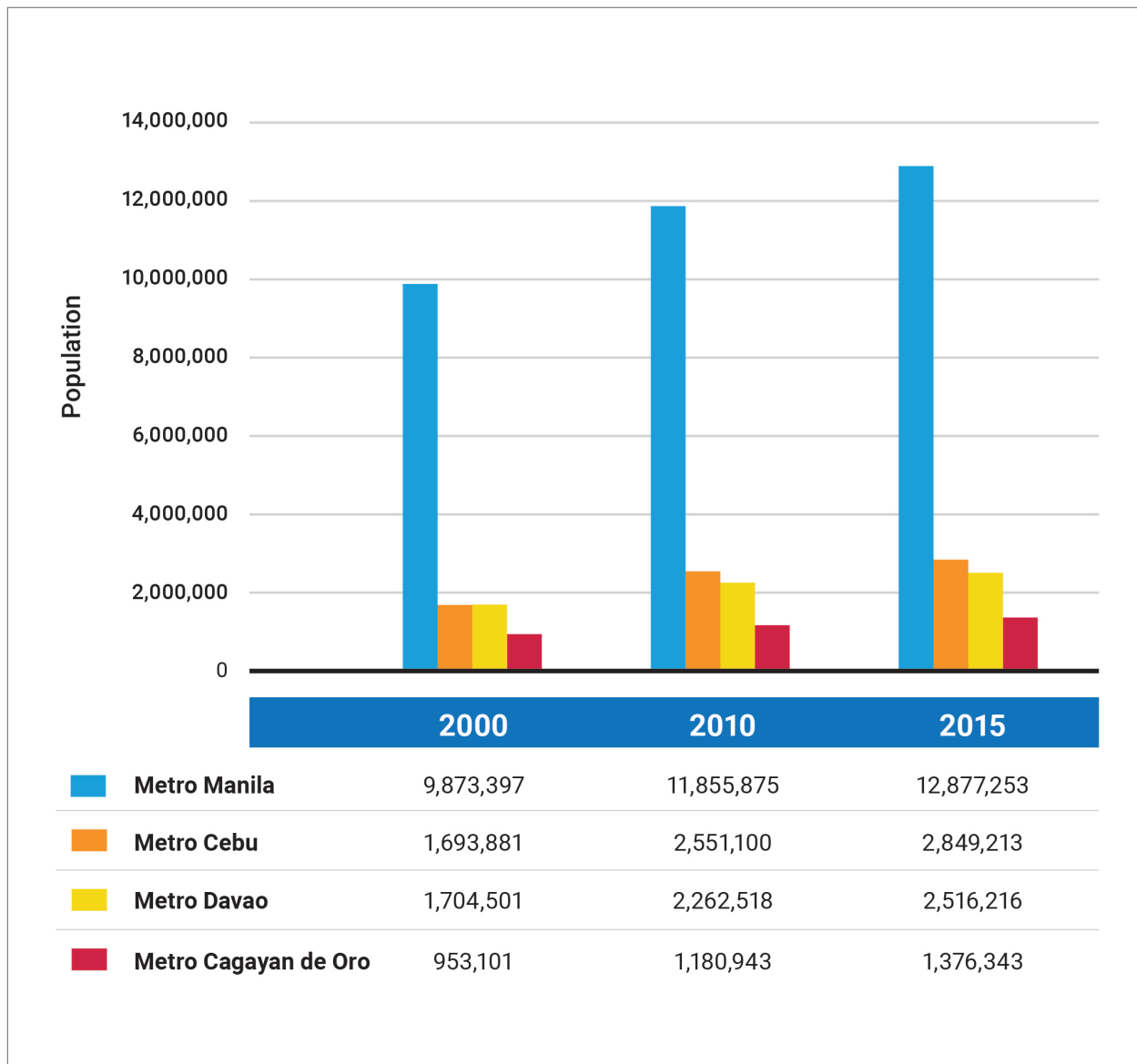


Source: PSA

Population growth of metropolitan areas and major cities

NCR had the largest population with 12.9 million among the metropolitan areas in 2015, followed by Metro Cebu (2.9 million), Metro Davao (2.5 million), and Metro Cagayan de Oro (1.4 million).

Figure 3.4 Population of Metropolitan Areas: 2000, 2010, and 2015

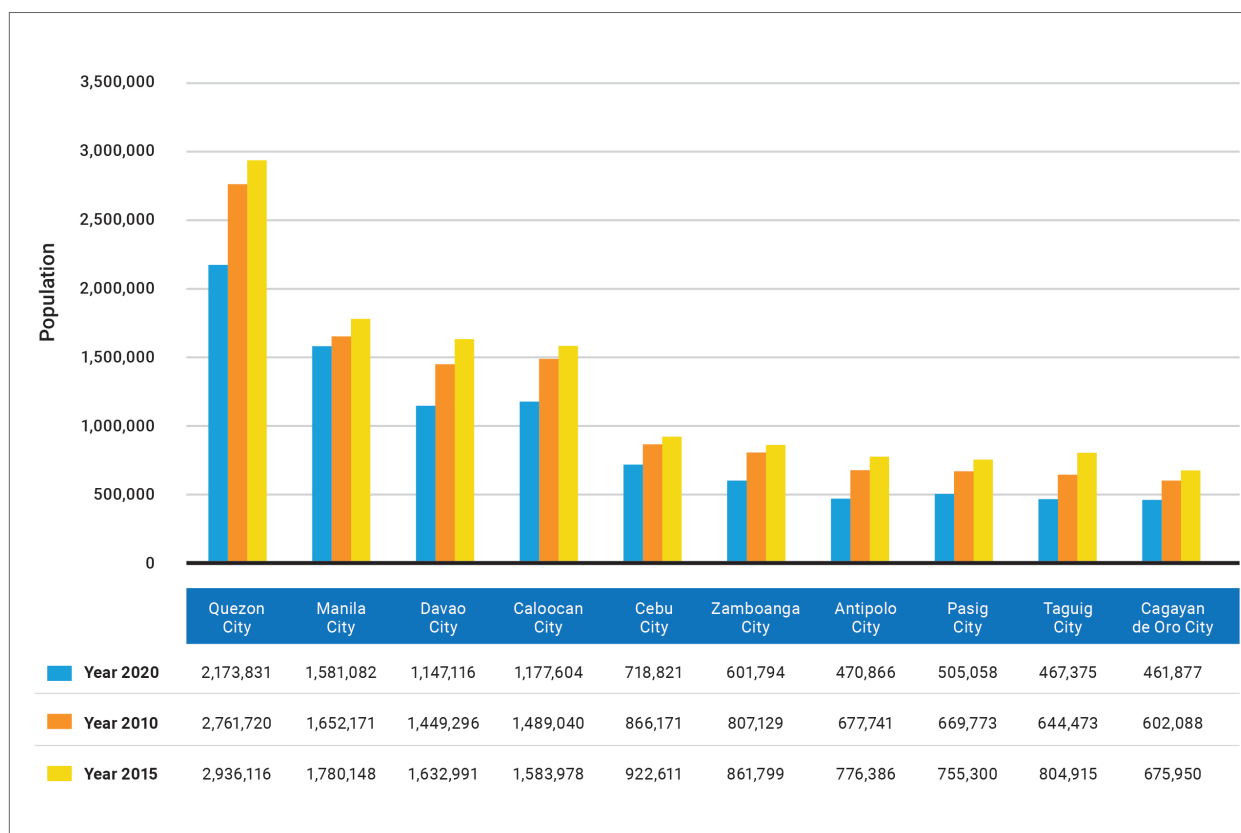


Source: PSA

In the same year, cities with the highest population in NCR were Quezon City (2.94 million), Manila City (1.78 million), and Caloocan City (1.58 million).

Outside of NCR, Davao City (1.63 million), Cebu City (922,611), and Zamboanga City (861,799) were the most populated cities in the country.

Figure 3.5 Population of Major Cities: 2000, 2010, 2015



Source: PSA

With few exceptions, more populated regions also have larger shares in GDP and real per capita GRDP, and have higher HDI value. This can be observed in NCR and its neighboring regions that have the highest population and economic development at the same time.

Given these economic and population trends, it is important to manage the development process such that access to social services and growth opportunities will be more equal across areas and that the economy and the people are resilient.

The National Spatial Strategy

The NSS aims to contribute to inclusive growth by improving physical connectivity and providing equal access to quality social services across regions. It also seeks to decongest NCR and direct growth to key centers throughout the country where the benefit of agglomeration can have greater potential of being realized. An overlay of the geographic characteristics, population, and economic growth

shows the areas where growth has been taking place and the characteristics of these growth centers. This guides the identification and development of strategic solutions such as the location of transportation linkages, high-quality urban services, as well as social development programs to improve the quality of life of Filipinos.

Implementing the NSS requires cooperation across national and local governments to ensure coherence of development plans and efforts. The NSS also provides a basis for identifying more specific projects that can serve as the catchment and market or service areas of the various centers. It can then be a reference for sectoral plans, spatial development frameworks of Regional Development Plans (RDPs), provincial development and physical framework plans, and Comprehensive Land Use Plans (CLUPs) of cities and municipalities.

Network of settlements

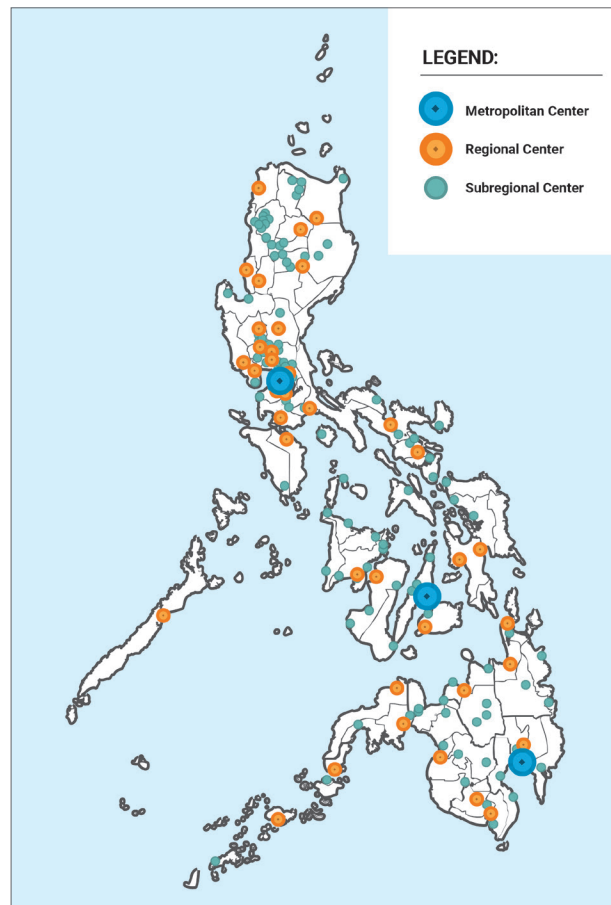
The country has a three-tiered network of settlements: (a) metropolitan centers; (b) regional centers; and (c) sub-regional centers. These centers form an efficient network of settlements with distinct functional roles contributing to the flow of economic activities within the network.

Metropolitan centers

Metropolitan centers provide higher forms of economic services and facilities, including innovation and advanced services, culture and tourism, education and research, transportation and trade, manufacturing, and technology development.

Metro Manila, Metro Cebu, and Metro Davao are the three major metropolitan centers in the country that serve as centers of commercial, financial, and administrative activities. Metro Manila continues to function as the country's premier metropolitan center—the seat of the national administration and the center of commerce and trade. Metro Manila's influence to its adjacent cities and municipalities has become more evident with new and important developments in the past three years. Notable of these is the New Clark City in Central Luzon, which is proposed to be a major business district with complete facilities for offices, housing, and sports and leisure. Moreover, Executive Order (EO) No. 119, s. 2020 mandated the establishment of the national government administrative center in Capas, Tarlac to serve as an integrated government

Figure 3.6 Major Urban Centers



center outside of the NCR, and, in case of a disaster, a recovery center and back-up administrative center. It has the locational advantage of being at the convergence points of North Luzon Expressway (NLEX), Subic–Clark–Tarlac Expressway (SCTEX), Gapan-San Fernando-Olongapo (GSO) road, the Manila-North Road, and the new North-South Commuter Railway.

Second to NCR is Metro Cebu which serves as the natural economic, commercial, and logistics center for the Visayas. The Metro Cebu Development and Coordination Board has completed its road map study for urban development highlighting competitiveness, mobility, livability and metropolitan management. It has also identified its priority project packages such as the Mega Cebu expressway, Cebu bus rapid transit, the new Cebu international container port, the third Cebu-Mactan bridge, and coastal road.

The third metropolitan center is Metro Davao, which is a major international gateway and serves as Mindanao’s premier commercial hub and center for education and health services. This role will be enhanced by the construction of the first phase of the Mindanao Railway Project in the first quarter of 2021. Furthermore, the institutionalization of the Metro Davao Development Authority will strengthen coordination among the component cities and municipalities in the planning, implementation, and monitoring of priority projects.

By 2025, Metro Cagayan de Oro is expected to be the fourth metropolitan center. It currently functions as a major gateway and transshipment hub and a key educational center in Northern Mindanao with potential growth of banana, rubber, bamboo, cacao, coco coir, coffee, agribusiness, and tourism.

Regional centers

Regional centers serve as regional markets and service centers to several provinces. Markets can support a range of services and investments and have direct linkages to metropolitan centers. They host government administrative centers, industrial and commercial areas, and transportation and tourism hubs.

Sub-regional centers

Sub-regional centers connect to, and serve as service centers of, smaller provincial and local centers. Considering the network of settlements listed below, the Updated PDP 2017-2022 will continue to pursue regional agglomeration, connectivity, and vulnerability reduction.

Table 3.3. Network of Settlements

NETWORK		REGION/PROVINCE/CITY/MUNICIPALITY	
Metropolitan Centers	<ul style="list-style-type: none"> NCR Metro Cebu Metro Davao 	<ul style="list-style-type: none"> By 2025, Metro Cagayan De Oro (CDO City, Jasaan, Villanueva, Tagoloan, Claveria, Manolo Fortich, Opol, El Salvador, Alubijid, Laguindingan, Gitagum, Libertad, Initao) 	
Regional Centers	<ul style="list-style-type: none"> Laoag City San Fernando City Dagupan City Tuguegarao City Santiago City Baguio City-La Trinidad-Itogon-Sablan-Tuba-Tublay Eastern Kalinga (Tabuk City-Pinukpuk-Rizal) Cabanatuan City Tarlac City Subic-Olongapo City Balanga City Clark (Angeles City-San Fernando City-Mabalacat City-New Clark City) Baliuag 	<ul style="list-style-type: none"> Malolos City Dasmariñas City Antipolo City Calamba City Batangas City Lucena City Calapan City Puerto Princesa City Legazpi City Naga City (Camarines Sur) Iloilo (Iloilo City -Pavia- Oton-Leganes, Santa Barbara-Cabatuan-San Miguel) Bacolod (Bacolod City-Bago City-Talisay City-Silay City-Murcia) 	<ul style="list-style-type: none"> Tagbilaran City Tacloban City Ormoc City Zamboanga City General Santos City Butuan City Cotabato City Dipolog City Jolo Surigao City Pagadian City Koronadal City Tagum City
Sub-regional Centers	<ul style="list-style-type: none"> Alfonso Lista (Potia) Banaue Bangued Bauko Besao Bontoc (Mountain Province) Danglas 	<ul style="list-style-type: none"> Flora Kiangan La Paz (Abra) Lamut Langiden Luna (Apayao) Peñarrubia 	<ul style="list-style-type: none"> Pidigan Pudtol San Jose City San Jose del Monte City San Miguel (Bulacan) Santa Maria (Bulacan) Bacoor City

NETWORK	REGION/PROVINCE/CITY/MUNICIPALITY		
Sub-regional Centers	<ul style="list-style-type: none"> • Baras (Rizal) • Biñan City • Cabuyao City • Cainta • Gen. Mariano Alvarez • General Trias City • Imus City • Trese Martires City • Lipa City • Nasugbu • Santo Tomas (Batangas) • Kabankalan City • Estancia • Dumangas • San Jose (Antique) • Miag-ao • Catbalogan City • Calbayog City • Jordan • Kalibo • Dumaguete City • Bogo City • Toledo City • Tubigon • Iligan City • Passi City • Panabo City • Marawi City • Ozamiz City • Sadanga • San Isidro (Abra) • Santa Marcela • Tayum • Tubo • Alaminos City • Urdaneta City • Vigan City • Cauayan City 	<ul style="list-style-type: none"> • Ilagan City • Santa Ana (Cagayan) • Arayat • Capas • Concepcion (Tarlac) • Hagonoy (Bulacan) • Lubao • Mabalacat City • Marilao • Mariveles • Mexico • Meycauayan City • San Fernando City (Pampanga) • San Ildefonso (Bulacan) • Binangonan (Rizal) • Rodriguez (Montalban) • San Mateo (Rizal) • San Pablo City • San Pedro City • Santa Rosa City • Sariaya • Silang • Tanauan City • Tanza • Taytay (Rizal) • Boac • Romblon (Capital) • San Jose (Occidental Mindoro) • Daet • Iriga City • Ligao City • Masbate City • Matnog • Pili • Sorsogon City • Tabaco City • Virac 	<ul style="list-style-type: none"> • Roxas City • Malay • San Carlos City (Negros Occidental) • Malaybalay City • Valencia City • Digos City • Polomolok • Midsayap • Mati City • Kidapawan City • Gingoog City • Bislig City • Tandag City • Tacurong City • Bongao • Parang (Maguindanao) • San Francisco (Agusan del Sur) • Tubod (Lanao del Norte) • Maramag • Ipil • Glan (Saranggani) • Malita • Laguindingan • Isabela City - Lamitan • Aurora (Zamboanga del Sur) • Bayog • Buug • Dumalinao • Dumingag • Kabasalan • Mahayag • Margosatubig • Molave • Sindangan

Functions of centers

The metropolitan centers of NCR, Metro Cebu, and Metro Davao provide domestic and international services and facilities. Meanwhile, regional and sub-regional centers have distinct sizes, services, natural physical features, and strategic locations that enable them to host certain activities or functions.

Regional Centers

- **Regional administrative centers:** Baguio City, Tuguegarao City, San Fernando City (La Union), Calamba City, Legazpi City, San Fernando City

(Pampanga), Calapan City, Tacloban City, Iloilo City, Butuan City, Pagadian City, and Koronadal City

- **International gateways (examples):** Iloilo City, Bacolod City, Metro Clark Area, Zamboanga City, Legazpi City, Laoag City, Puerto Princesa City, and General Santos City
- **Tourism hubs (examples):** Legazpi City, Naga City, Calapan City, Puerto Princesa City, Laoag City, Tagbilaran City, and Surigao City

Sub-regional Centers

- **Tourism hub (examples):** Alaminos City, Matnog, Malay, Kalibo, Jordan, and Tubigon
- **Agri-industrial centers (examples):** Midsayap, Mati, Cauayan City, Polomolok, Kidapawan City, Bislig, Tacurong City, and Calbayog City
- **Industrial centers (examples):** Biñan City, Sta. Rosa City, Lipa City, Tanauan City, San Carlos City, Iligan City, Subic, and Mariveles
- **Higher education (examples):** Marawi City and Dumaguete City

These centers share the same characteristics as some of the existing economic zones identified in the Special Economic Zone Act and the tourism circuits identified in tourism plans.

Regional agglomeration

Regional agglomeration aims to improve urban efficiencies and maximize the benefits of scale and agglomeration economies. It recognizes the role of cities as engines of growth and sites of innovation. It will build on the current trends of growth such as the faster growth in some regions. The spatial strategy aims to manage the growth of key centers in the country for them to function more efficiently.

Manage the growth process through an integrated approach to urban planning. Cities face various urban challenges such as congestion, pollution and waste, lack of green spaces, and increasing demand for social services including housing, health, sanitation, and education. Addressing these requires an integrated approach to urban planning and development. To this end, master plans have been formulated to address urban inefficiencies and guide sustainable urban development. The Roadmap for Transport Infrastructure Development for Metro Manila and its Surrounding Areas and the Urban Transport Master Plan of Metro Cebu and the Davao City Infrastructure Development Plan and Capacity Building Project (IM4Davao) in Metro Davao are being implemented to reduce

traffic, enhance competitiveness, improve safety and disaster response, and contribute to sustainable urban development of the areas covered.

Other master plans are now being formulated for 11 cities which will guide the preparation and implementation of programs and projects for sustainable infrastructure development (*see Chapter 19*). These plans also adopt the smart city principle in urban mobility, natural and built environment, sustainable energy, and economic competitiveness. The implementation of these plans will require retooling of current government institutions and advancements in planning approaches and urban management practices.

Pursue sustainable rural development and ensure better access to opportunities. The development gap between urban and rural areas manifests in the lack of economic opportunities and access to social services and facilities including health, education, and water and sanitation in the countryside. These are issues that the government needs to address to ensure that no one is left behind, whether they live in urban or rural areas. Balancing regional development entails the transformation of rural communities into productive agri-industrial or tourism areas with improved delivery of social services including education, health, and housing (*see Chapters 8, 9, 10, and 12*).

With this in view, the *Balik Probinsya, Bagong Pag-asa* (BP2) program was created through EO No. 114, s. 2020 to bring about a more equitable distribution of wealth, resources, and opportunities to the countryside. It involves the convergence of national government and local government unit (LGU) programs and projects that will not merely bring back people to the provinces, but promote sustainable communities in the countryside.

Linking rural areas to urban areas physically through transportation systems or virtually through information and communications technology (ICT) will enable people in rural areas to gain more access to alternative opportunities for employment, and bigger markets for their products. Moreover, better connectivity will make it easier for people in rural areas to have access to higher levels of services such

as universities and specialized health institutions which may not be feasible in smaller communities.

Increase investments and spending efficiency to expand and improve the quality of social services to meet growing demand. Growth centers attract people seeking better opportunities and access to amenities. To meet growing demands that come with continuous increase in population, the government will expand and improve facilities and provide additional human resources in the sectors of housing, health, sanitation, and education (*see Chapters 10, 12, and Chapter 19*). As centers of consumption, cities are also the main producers of waste, hence, the need to promote waste reduction and management.

Fast-track investment in transport infrastructure and traffic management system to reduce congestion and ensure mobility. The government will continue to fast-track investment in transportation infrastructure to reduce traffic congestion and shorten distance and travel times between business and industrial centers, tourism areas, services, and residential areas. The immediate remedial measures will be the enforcement of traffic laws, traffic management measures, and transport demand management schemes. Application of intelligent transportation systems will also be explored to help manage traffic flow in growth centers efficiently, minimize accidents, and provide transport and traffic information to passengers and decision-makers (*see Chapter 19*).

Adopt “smart city” principles and increase technical, managerial, and financial capability of national and local institutions to implement such. Improved urban environment and quality of life will be pursued through urban renewal and urban redevelopment projects. The current pandemic has brought greater consciousness on urban development designs and housing standards, considering that the most number of cases are in cities with higher population densities and where physical distancing is a challenge. This does not necessarily invalidate the agglomeration strategy as co-location promotes efficiency in service delivery, land use, and urban development. However, the aspect of livability will be given more emphasis

by promoting healthier lifestyles, environmental consciousness, and sustainable urban design. The government will pursue and apply “smart city” principles such as urban mobility to include cycling lanes and walking paths, greener city, sustainable energy, public safety, and economic competitiveness to achieve sustainable urban development. This will require new or higher level technical, executional, and financial management skills among national agencies and local governments. Capacity building will therefore be encouraged through partnerships with academic and training institutions, private sector, and international development agencies.

Improve social service delivery of LGUs. LGUs need to be able to provide access to adequate and high-quality social services, set up appropriate facilities, and institute waste management schemes. The national government and development partners will be able to provide technical and financial assistance to them. Collaboration and complementation between national and local governments will be crucial to ensure coherence of development plans so that there will be no gaps in service delivery.

Connectivity

As agglomeration takes place, socioeconomic inequalities across space can be reduced through improved inter-connection of settlement areas. Rather than forcing a uniform dispersal of development which can create inefficiencies, the strategy is to establish better transport networks that will enable urban centers with high growth potentials to further expand growth while providing better access to opportunities to lagging areas. With more efficient network of settlements, more opportunities for production and employment are expected to be generated, thus increasing family incomes and savings for investment and growth, and reducing poverty. Beyond physical connectivity through transport systems, investments in telecommunications, technology, and innovation will ensure that even lagging or conflict-affected areas will have access to services and employment opportunities.

Flesh out and swiftly implement policies and plans for promoting connectivity and guiding infrastructure development in the country. The NEDA Board has already approved the NTP which will guide the rational development of an intermodal transport network, promote sub-regional cooperation on multimodal transport system, and create a transport database. Harmonized efforts of various government agencies and instrumentalities will be key in ensuring that such policies will be properly implemented. Timely completion of transport infrastructure projects under the Build Build Build (BBB) program will be pursued by addressing implementation bottlenecks under the new normal (*see Chapter 19*).

Identify the remaining missing links in local and national road networks. An integrated approach to transport planning and project implementation will be pursued through closer engagement between national transport agencies and LGUs. With their expertise, the Department of Public Works and Highways (DPWH) and the Department of Transportation (DOTr) can provide assistance in coming up with their local transport and traffic management programs that are aligned with national priorities (*see Chapter 19*). These can then be integrated in the spatial and development plans of LGUs. For hazard-prone areas, road networks for redundancy have to be constructed to establish alternative routes for disaster response and evacuation.

Ensure the accessibility, availability, affordability, convenience, and reliability of public transport (e.g., railway, bus, etc.). This will involve rationalization of the public transport design or transport routes to serve new and emerging origins and destinations. Public transport terminals that integrate different modes of public transportation will be established in strategic locations. The nautical highway of the country will be strengthened through the improvement of existing Roll-on, Roll-off (RORO) ports and the establishment of new ones. Improvements and expansion of airport facilities across the country will also be continued to meet the demand and improve the quality of air travel (*see Chapter 19*).

Develop an efficient logistics system. The COVID-19 pandemic has brought forth the importance of efficient logistics system, particularly in ensuring undisrupted delivery of food and essential goods. Efficient transport systems are also critical in times of crises. Moreover, concerned agencies such as the Department of Agriculture (DA) and the Department of Trade and Industry (DTI) will collaborate in mapping out supply chains in their respective sectors and identify bottlenecks and the corresponding measures so that the goods will be delivered to their destinations on time (*see Chapter 9*). Private logistics companies can also utilize ICT to monitor incidents that can delay or disrupt the movement of raw materials and manufactured products, including medicines and medical equipment.

Increase investment in ICT infrastructure. Reliable ICT infrastructure has become vital in ensuring continued government and private sector services, particularly as physical distancing and quarantines have prevented on-site activities (*see Chapter 19*). Hence, connectivity under the new normal will rely more on digital infrastructure to support online businesses and personal transactions, as well as online education and health services (*see Chapters 9 and 10*). Flexible work arrangements such as work from home and compressed work weeks in government and private sector offer relief to the congested transport networks but will also require more ICT investments for faster digital connectivity.

Reduction of vulnerability

The NSS seeks to make vulnerability reduction an integral part of development. This involves instituting prevention and mitigation measures to reduce the impact of climate change and disasters. These measures include redundancy routes to provide access to areas affected by disasters.

Due to its geographical location, the country is susceptible to geologic and hydrometeorological hazards. Disaster risk is also aggravated by uncontrolled development, particularly within ecologically-sensitive and hazard-prone areas.

Based on the 2019 World Risk Index, the Philippines ranked 9th among countries with the highest disaster risk, a slight improvement compared to 2018 where the country ranked 3rd. This can be attributed to the country's continuous effort to strengthen its capacity to prepare for and mitigate the negative effects of disasters and climate change.

Despite this gain, the country still needs to maintain substantial investments in vulnerability reduction initiatives given the level of risk. According to the latest Philippine Atmospheric, Geophysical, and Astronomical Services Administration (PAGASA) climate change projections, we can expect (a) continuous warming at a rate of 0.1°C per decade; (b) increasing trends in annual rainfall and seasonal rainfall in many parts of the country associated with extreme rainfall events; (c) minimal increase in the frequency of very strong tropical cyclones exceeding 170 kilometers per hour; and (d) a 20-centimeter increase in sea level rise by the end of the 21st century.

Mainstream DRR and CCA in identified growth centers, considering the expected increase in population and economic activities in these areas.

Locations of new development projects and urban expansions will be guided by hazard maps and information to minimize exposure to hazards. This will also entail ensuring that alternate or redundant access are in place to prevent isolation during disasters, and ensure that there are properly placed and designed evacuation sites.

Promote extensive use of recently developed information technologies to manage disaster risks.

The Department of Science and Technology–Philippine Institute of Volcanology and Seismology (DOST-PHILVOLCS) is currently implementing its GeoRiskPH program. The HazardHunter application developed under this initiative can quickly generate an initial geologic and hydrometeorological hazards assessment for specific locations. Its GeoMapper feature, which stores hazard and disaster exposure information, is intended to serve as the central source of information for accurate disaster risk assessments, and its GeoAnalytics application performs hazards

and risk assessment that provides a visualization through maps and charts.

Given the significant accomplishments of the national government in generating scientific information on hazards and disaster risks, the continuous data build-up and updating of relevant databases and platforms of DOST and other agencies will be pursued and supported. Disaster risk assessments will be undertaken, utilizing more recent information on hazards and elements exposed to it. These will be used to update local development and sectoral plans. These updated assessment results can also guide adjustments or recalibrations of DRR and CCA interventions.

LGUs and citizens must be able to access, appreciate, and make full use of these information technologies for disaster preparedness and mitigation actions. In this regard, LGUs will be trained and assisted using these for planning and identifying, designing, financing, and implementing the initiatives to increase their resiliency. Inter-LGU cooperation will also be pursued to address the impacts of natural hazards that affect multiple municipalities, cities, and provinces.

Build capacities to mitigate and respond to disease outbreaks and pandemics.

Past efforts on disaster risk reduction and management (DRRM) have focused on geologic and hydrometeorological hazards. COVID-19 has exposed the need to build the capacities of national and local governments to prepare for and respond to a disease outbreak of such a magnitude of pandemic. The traditional DRRM and crisis management frameworks will be reviewed and updated to ensure the country's readiness to prepare, mitigate, and respond to public health emergencies, given also the possibility that disease outbreaks can occur simultaneously with natural hazards such as typhoons or floods. Disaster management agencies such as the Office of Civil Defense (OCD), and LGUs will be adequately provided with equipment and medical supplies and evacuation centers and quarantine facilities that will be designed and constructed to meet the varying requirements of such hazard events.

Providing the Spatial Directions to the *Balik Probinsya Bagong Pag-asa* (BP2) Program

The BP2 program was established in May 2020 through EO 114. The program aims to promote balanced regional development and equitable distribution of wealth, resources, and opportunities. This involves complementary strategies of enabling economic growth in areas with high potentials, and providing better opportunities to the countryside, thereby achieving inclusive growth.

The program, which will have short-, medium-, and long-term components, will provide the mechanism for convergence among regional agencies and local governments in investing in sustainable rural development projects. Specifically, the BP2 program is expected to evolve from government-assisted relocation to voluntary relocation of people from congested urban communities to more progressive rural communities. This can be achieved through empowering local industries, enhancing agricultural productivity, providing quality and efficient social services, and upgrading infrastructures.

The NSS will guide the implementation of the BP2 program by providing the trends in settlements development and the roles of various urban centers in the country. These will inform more detailed planning and analysis of BP2 interventions such as the possible locations of agri-industrial areas, housing projects, and infrastructure facilities that will address the immediate needs of communities, the connectivity among urban centers and production centers, and other critical spatial functions that will determine comparative advantages of specific areas.

04 Philippine Development Plan 2017-2022 Overall Framework



Philippine Development Plan 2017-2022 Overall Framework

The Philippine Development Plan (PDP) 2017-2022 is the first of four medium-term plans geared towards the realization of *AmBisyon Natin 2040*, the collective long-term vision and aspirations of the Filipino people for a *matatag, maginhawa, at panatag na buhay para sa lahat* (strongly-rooted, comfortable, and secure life for all). In the first three years of PDP implementation, critical reforms were put in place to ensure that development is steered to enable all Filipinos to attain their *AmBisyon* and that economic growth is inclusive and sustainable to improve quality of life. At the midterm of the Plan implementation, the world experienced the COVID-19 pandemic which will have an indelible effect on the socioeconomic development of the country. Thus, the PDP has been updated to build on the gains in recent years and consider the imperatives for recovery and adapting to the new and better normal state of affairs. Moving forward, the health and resiliency of Filipinos will be prioritized as the foundation for achieving *AmBisyon Natin 2040*.

Updated Headline Targets

Core indicators and corresponding headline targets were identified to achieve the desired outcomes for the Plan period. Chapter 1 presented the accomplishment per core indicator vis-à-vis targets set during the preparation of the PDP. As discussed therein, accomplishments from 2017 to 2019 have been mixed – in most cases, targets were achieved in certain years, but fell short in others. In general, substantial accomplishments have been achieved towards a more inclusive growth, a high-trust and resilient society, and a globally-competitive knowledge economy. During the first half of the Plan period, key reforms have also been instituted which are expected to bear fruit in the succeeding years.

The immediate socioeconomic impact of the pandemic in 2020 is substantial. This will most likely spill over to 2021 and 2022. Taking this into consideration, some targets for 2021 and 2022 have been revised downwards. Since the updating of the PDP happened in the second half of 2020, the targets for 2020 were maintained. It is expected that a number of these targets will not be achieved

considering major disruptions in the programs, projects, and activities (PPAs) of the government and the private sector. Adaptive planning was done to prioritize urgent requirements to address the adverse impact of the pandemic.

The Inter-Agency Task Force for the Management of Emerging Infectious Diseases (IATF-EID) created the Technical Working Group on Anticipatory and Forward Planning (TWG-AFP) to assess the impacts of the pandemic and the resulting community quarantine on various sectors of society and provide recommendations on rebuilding national confidence and adjust to the new normal. The resulting “We Recover As One” report of the TWG-AFP identified the immediate and critical PPAs of the different agencies in order to cushion the impact of the pandemic on the population, particularly the vulnerable sectors. It should also be noted that budgets of most government agencies were reduced in order to fund the immediate health and social protection requirements for the most affected sectors of the population.

Table 4.1 PDP 2017-2022 Core Indicators and Headline Targets

INDICATOR	BASELINE VALUE (YEAR)	PLAN TARGETS					
		2017	2018	2019	2020 ^{2/}	2021	2022
GDP (growth rates) sustained	7.1 (2016) ^r	6.5- 7.5	7.0-8.0	7.0-8.0	7.0-8.0	6.5-7.5	6.5-7.5
GNI per capita (growth rates) increased	4.5 (2015)	4.5	5.0	5.0	5.0	5.0-6.0	5.0-6.0
Poverty incidence (% of population) reduced^{1/}	23.5 (2015) ^r	-	17.3-19.3	-	-	15.5-17.5	-
Subsistence Incidence (%) reduced^{1/}	9.1 (2015) ^r	-	6.8	-	-	5.0-7.0	-
Food inflation (%) kept stable	1.7 (2016) ^a	2.0-4.0	2.0-4.0	2.0-4.0	2.0-4.0	2.0-4.0	2.0-4.0
HDI improved	0.701 (2015) ^r	Increasing	Increasing	Increasing	N/A	Increasing	N/A
Unemployment rate (%) decreased	5.4 (2016) ^r	5.1-5.4	4.7-5.3	4.3-5.3	3.8-5.2	7.0-9.0	7.0-9.0
Employment generated increased (count)	NA (2016)	900,000-1.1 Mn	900,000-1.1 Mn	900,000-1.1 Mn	900,000-1.1 Mn	2.4-2.8 Mn	1.0-1.2 Mn
Youth unemployment rate (%) decreased	11.5 (October 2016)	11.0	10.4	9.8	9.2	14.5-16.5	20.5-22.5
Underemployment rate in areas outside NCR (%) decreased	19.7 (2016)	18.3-20.3	17.8-19.8	17.4-19.4	16.9-18.9	16.0-18.0	15.5-17.5
GII (rank) improved	74 out of 128 economies (2016)	Increasing	Increasing	Increasing	Increasing	Increasing	Top one-third

Note: r – revised; a – adjusted original target set in 2016 will be retained;

^{1/} No target/data since FIES is conducted every three years. The next FIES will be conducted in 2021.

^{2/} The 2020 PDP targets set in 2016 will be retained

The medium-term goal remains the same: by the end of 2022, more Filipinos will be closer to their *AmBisyon* of living a *matatag, maginhawa, at panatag na buhay*. The health and resilience of Filipinos will be prioritized in the medium term as the foundation to achieving this aspiration. The following are the headline targets over the remaining Plan period.

Economic growth. With an expected contraction in 2020, economic growth in 2021 and 2022 is expected to be slightly lower than the initial target. For 2021 and 2022, growth in terms of Gross Domestic Product (GDP) is expected to be within 6.5 percent to 7.5 percent. The goal of reaching upper middle-income status for the country will most likely be achieved by 2022 or earlier. Gross National Income (GNI) per capita targets are 5.0 percent to 6.0 percent in 2021 and 2022, respectively.

Poverty incidence. The substantial decline in overall poverty from 2015 to 2018 will not be sustained over the period in 2018 to 2021,¹ given the impact of the COVID-19 pandemic. Hence, the target for 2021 is 15.5 percent to 17.5 percent, compared to 16.7 percent in 2018. While the next set of poverty estimates is expected in 2023, the initial target of 14 percent by 2022 is still achievable. The same can be said for subsistence poverty, with a substantial decline in the proportion of subsistence poor individuals from 9.1 percent in 2015 to 5.2 percent in 2018. The revised target for 2021 is 5 percent to 7 percent, which is within the 2022 target of 5 percent. Food inflation will be sustained at 2 percent to 4 percent in 2021 and 2022.

Human development. The human development index (HDI) of the Philippines has gradually increased from 2015 to 2019. The trend is expected to continue until 2022.

Unemployment. There has been a sustained improvement in employment levels from 2017 to 2019. The increase in unemployment in 2020 due to the pandemic is expected to gradually recover

beginning late 2020 and on to 2021. In addition, the labor force will substantially increase in 2022 as the first batch of K to 12 graduates will be graduating from college and are expected to join the labor force. Hence, unemployment targets in 2021 and 2022 are revised to 7 percent to 9 percent. This implies that 2.4 to 2.8 million jobs in 2021 and 1.0 to 1.2 million jobs in 2022 are expected to be created. As the bulk of the labor force are among the younger age group, youth unemployment is expected to increase from 14.5 percent to 16.5 percent in 2021 and 20.5 percent to 22.5 percent in 2022. On the other hand, the target for underemployment in areas outside National Capital Region (AONCR) is 16 percent to 18 percent in 2021 and 15.5 percent to 17.5 percent in 2022.

Innovative society. The Philippines' rank in terms of the Global Innovation Index (GII) significantly improved in 2019, ranking 54th out of 129 economies; then further up to 50th rank out of 133 countries in 2020. This is expected to increase with a target for the country to be among the top one-third (40th to 42nd rank) by 2022.

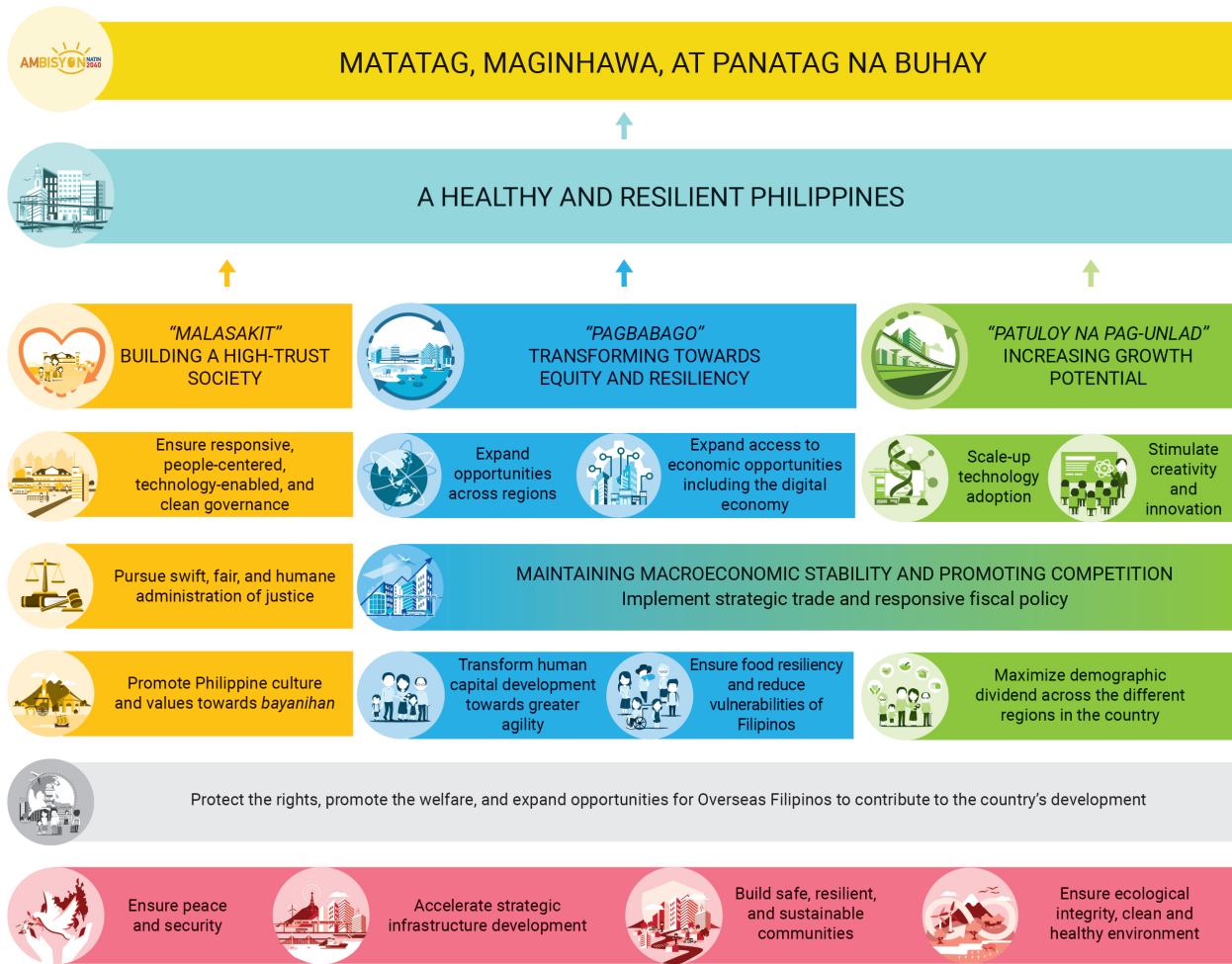
Strategic Framework

The PDP 2017-2022 strategic framework was updated to align it with the imperatives for recovery and the new and better normal within the overall goal of a healthy and resilient Philippines. The strategies to achieve the abovementioned targets fall under the three major pillars of *Malasakit* (building a high-

trust society); *Pagbabago* (transforming towards equity and resiliency); and *Patuloy na Pag-unlad* (increasing growth potential). There are crosscutting strategies to support the other interventions, and bedrock strategies to provide a solid foundation for all strategies to work.

¹ The Family Income and Expenditure Survey (FIES) used to estimate poverty will be conducted in 2021 and will be done every two years thereafter.

Figure 4.1 Updated Philippine Development Plan 2017-2022 Strategic Framework



Strategies

For *Malasakit*, the aim is to regain the people's trust in public institutions and cultivate trust among Filipinos.

Ensuring Responsive, People-centered, Technology-enabled, and Clean Governance (Chapter 5) focuses on building transparent, accountable,

and effective institutions resulting in efficient delivery of public services and high public trust. Over the past three years, major reforms in the governance sector increased the access to and quality of frontline services. The next step is to expedite the implementation of these laws. In light of the COVID-19 pandemic, the government will accelerate its shift to digital platforms for citizen engagement, service delivery, capacity-building, and accountability and anti-corruption mechanisms.

Public service continuity plans will be formulated across government agencies. Local government units (LGUs) will be capacitated for the implementation of the Supreme Court ruling on the *Mandanas* case.

Pursuing Swift, Fair, and Humane Administration of Justice (Chapter 6) aims to adopt a sector approach from a fragmented mode of delivering justice, thus, streamlining and harmonizing processes across the different agencies in the executive and judiciary branches of the government. Since the start of the Plan period, higher case disposition and clearance rates due to process improvements and increased number of prosecutors, public attorneys, and courts contributed to swift administration of justice. The COVID-19 pandemic emphasized the need for justice sector agencies to maximize the use of digital platforms in ensuring swift, fair, and humane administration of justice amidst such disruptions. Coordination and cooperation among justice sector agencies will further be strengthened and the agencies will continuously streamline and improve processes within the different pillars of the justice system.

Promoting Philippine Culture and Values towards *Bayanihan* (Chapter 7) highlights increasing awareness and promotes the value of the country's cultural diversity and shared heritage among Filipinos. This is a new chapter in the PDP, and this recognition has provided a venue for the culture sector to take stock of challenges and pursue strategies to address them. The government's greater awareness and recognition of the role of culture in the country's socioeconomic development prompted significant foundational efforts in the sector. Moving forward, the government will ensure that initial gains will be sustained to eventually establish sustainable mechanisms for cultural development from the national to local levels. The Filipino spirit of *bayanihan* will be invoked to enable the whole-of-government and whole-of-society response and recovery from the pandemic by promoting cultural awareness and understanding, inculcating values for the common good, advancing creativity for social impact, and strengthening culture-sensitivity in governance and development.

For *Pagbabago*, economic and social opportunities will be ensured for all, to transform society and achieve equity and resiliency.

Expanding Economic Opportunities in Agriculture, Forestry, and Fisheries and Ensuring Food Security (Chapter 8) targets small farmers, fisherfolks, and micro, small, and medium enterprises (MSMEs) to ensure that the groups that lag behind will benefit from these opportunities. The first half of the Plan implementation was focused on improving the delivery of support services prioritizing small farmers and fisherfolk on financing, insurance, technologies, and intensified market matching, complemented with major policy reforms that created opportunities to pursue diversification and overall rural development. The COVID-19 pandemic and community quarantine has put greater emphasis on food security in the transition to the new and better normal. Thus, to contribute to the goal of achieving a healthy and resilient Philippines, the agriculture, forestry, and fisheries sector will focus on ensuring availability, accessibility, and affordability of nutritious food while continuously addressing persistent challenges faced by the sector. These challenges include constraints to land and water resources, vulnerability to climate change and disaster risks, long-standing institutional problems related to weak extension services, over-centralization, and lack of coordination and overlapping functions within and among agencies.

Expanding Economic Opportunities in Industry (Chapter 9A) aims to increase the sector's output by leveraging Industry 4.0 technologies and to usher in the growth of the digital economy. In the past three years, the industry sector's contribution to overall growth remains within its 10-year average, although the recent decline in output reflected lower domestic demand exacerbated by supply chain disruptions and policy uncertainty. Moving forward, the sector will operationalize the Inclusive, Innovation, and Industrial Strategy (i3S), to boost capacity of local

enterprises, adopt inclusive business models, and strengthen the startup ecosystem. The government will prioritize reforms to support the digital economy as these are essential elements for the new normal.

Expanding Economic Opportunities in Services (Chapter 9B) aims to maximize the sector's role as an integral backbone to a wide range of domestic and global industries. The services sector has established its position in recent years as the main driver of economic growth, top GDP contributor, and biggest employer of the country. However, with the sudden halt of major subsectors such as tourism and transport services, a shift to more digital-based services is needed to propel the services sector as part of the supply chain of high-value services in the global market. Hence, the necessary reforms to attract investments and push relevant services sub-sectors to become more competitive will be prioritized.

Expanding Access to Economic Opportunities in I&S for Startups, MSMEs, and Cooperatives (Chapter 9C) aims to promote business inclusion among groups that lag behind. In the past three years, critical policy reforms have been established to assist startups, MSMEs, and cooperatives to gain access to finance and production networks, as well as enhance their productivity, efficiency, and resilience. Moving forward, the government and the business sector will pursue the full implementation of these reforms while addressing the adverse impacts of the pandemic, by providing assistance to enable enterprises to reconfigure business operations and build their resiliency to address the constraints of operation under the new and better normal.

Transforming Human Capital Development Towards Greater Agility (Chapter 10) ensures that individuals and groups will have more options to develop their full potential. From 2017 to 2019, reforms in nutrition and health were institutionalized through the passage of landmark legislations such as the Universal Health Care (UHC) Act and the First 1,000 Days Act. Similarly, access to education at all levels was expanded through the K to 12 Program and the Universal Access to Quality Tertiary Education. However, Filipinos' poor health-seeking behavior and the fragmentation of health service delivery systems, exacerbated by the pandemic, pose

a serious challenge that can undermine previous accomplishments. For the rest of the Plan period, the government will focus on addressing challenges that hamper the full realization of the Filipino people's full potential, such as malnutrition, early pregnancy, quality of education, and disruptions brought by the pandemic and other disasters.

Ensuring Food Resiliency and Reducing Vulnerabilities of Filipinos (Chapter 11) focuses on the provision of social protection for vulnerable groups. Social protection programs have provided considerable contributions in the reduction of poverty, inequality, and vulnerability in the country. The current pandemic has amplified the importance of social protection programs and the need to enhance distribution systems. For the rest of the Plan period, the government will focus on proactively minimizing Filipinos' exposure to risks and increasing their capacities to manage shocks, such as setting up registries for vulnerable sectors, expanding coverage of the Social Security System (SSS), and instituting employment insurance schemes.

Building Safe, Resilient, and Sustainable Communities (Chapter 12) shifts the focus from socialized housing to human settlements development in line with the new urban agenda of developing integrated neighborhoods and sustainable communities. The creation of the Department of Human Settlements and Urban Development (DHSUD) through Republic Act 11201 is a major reform to effect better policy and program coordination, reform advocacy, and implementation. The urgency to address the growing need for adequate housing in well-planned communities has never been a matter of survival until the country confronted the COVID-19 pandemic. The rapid increase of the spread of the virus is evident in various highly-dense communities, given the difficulty to observe safe social distancing in congested spaces and inadequate access to household water and sanitation. Moving forward, the housing and urban development sector will pursue building safe, resilient, and sustainable communities through the Building Adequate, Livable, Affordable, and Inclusive Filipino Communities (BALAI) program, in partnership with the private sector, the LGUs, and the communities.

For *Patuloy na Pag-unlad*, future growth will be accelerated and sustained.

Reaching for the Demographic Dividend Across All Regions (Chapter 13) and maximizing the full harvest of this dividend will require aggressive efforts to ensure that families will be of the size that they can adequately care and provide for. Towards this end, policies and programs to accelerate the demographic transition along with improving access to health and education services were instituted. However, the socioeconomic impacts brought about by the COVID-19 pandemic can possibly reverse these gains. To prevent this, the government will implement programs that will mitigate the pandemic's short and long term effects while continuing to address persistent issues on malnutrition, access to health services, and quality of graduates for employment. These will allow the country to still reach the demographic dividend and build a healthy and resilient Philippines.

Vigorously Advancing Science, Technology, and Innovation (Chapter 14) is a major strategy to sustain and further accelerate growth in the future by graduating to a knowledge economy. This is a new chapter introduced in the PDP 2017-2022, which recognized the need to strengthen the country's weak science, technology, and innovation (STI) ecosystem. Moving forward, the government will focus the sector's efforts towards health and resiliency. This will include the rollout of technologies that will help address the pandemic and its impacts. Various government support services for startups and MSMEs will also be ramped up to help them become more innovative and resilient in times of crisis. In pursuit of a more inclusive STI ecosystem, the creative arts will also be included in these efforts. The establishment of the National Innovation Council (NIC), which is seen to guide the country towards long-term STI development, will also be fast-tracked.

An enabling and supportive economic environment supports the *Pagbabago* and *Patuloy na Pag-unlad* pillars.

Ensuring Sound Macroeconomic Policy (Chapter 15) aims to promote a responsive fiscal policy by enabling budget policies and revenue measures, enhanced LGU capacity, improved private sector participation, and recalibrated debt and contingent liability management. It seeks to foster a resilient and inclusive financial system amid the COVID-19 pandemic through targeted supervisory actions and reforms, particularly in developing a more inclusive digital finance ecosystem, encouraging innovation in microfinance and microinsurance, and expanding consumer protection. As for the external sector, it promotes sustainability and resiliency through scaled up and diversified products and markets, and targeted comprehensive packages of support for specific products and services sectors. This is to take advantage of the shifts in business processes and consumer preferences under the new and better normal. Furthermore, key reforms such as the Corporate Recovery and Tax Incentives for Enterprises (CREATE) Act, the Financial Institutions Strategic Transfer (FIST) Act, and the Government Financial Institutions Unified Initiatives to Distressed Enterprises for Economic Recovery (GUIDE) Act will be actively pursued and implemented. These reforms aim to lower corporate income tax and rationalize incentives, ensure a sound financial sector, and provide liquidity, equity infusion, and credit guarantees to sectors affected by the pandemic. The country's strong and stable macroeconomic fundamentals complemented with these strategies and responsive reforms will enable prompt recovery from the downturn caused by the COVID-19 pandemic towards a healthy and resilient Philippines under the new and better normal.

Promoting Competition (Chapter 16) reinforces the Philippine Competition Act through strategies that aim to foster an environment that penalizes anti-competitive practices, facilitates entry of players and creates an economic playing field where these players operate and grow, supports regulatory

reform to address restrictive laws and regulations that hamper competition, and improves trade policies to stimulate investments and innovation and boost competitiveness. With the recent issuance of the National Competition Policy (NCP) through Joint Memorandum Circular No. 1 issued by the NEDA and the Philippine Competition Commission (PCC) on July 30, 2020, the government will ensure that its responses and interventions follow competition principles to address market failures.

Foundations for sustainable development are the bedrock strategies that support all the three pillars of the PDP 2017-2022.

These strategies will ensure that all the strategies identified above are implemented to achieve the intended outcomes.

Attaining Just and Lasting Peace (Chapter 17) emphasizes that peace is imperative for economic growth to be sufficiently buoyant, sustainable, and inclusive. The enactment and ratification of the Bangsamoro Organic Law marked a milestone in the peace process while the government institutionalized the whole-of-nation approach to end local communist armed conflict. Despite the successes, there is still a need to ensure that the gains of the peace processes are sustained towards community resilience and to avoid further escalation of conflicts. These can be achieved by implementing a smooth transition process in the BARMM, capacitating local governments to undertake localized peace engagements and strengthen convergence of national government agencies to end communist insurgency, and delivering the remaining commitments under closure agreements. Interventions in conflict-affected and conflict-vulnerable areas will be sustained while being mindful of new health protocols to ensure that the socioeconomic impacts of the COVID-19 pandemic will not aggravate the fragile situation in these areas.

Ensuring Security, Public Order, and Safety (Chapter 18) focuses on building the foundation for inclusive growth, a high-trust and resilient society, and a globally-competitive knowledge economy. Criminality has been reduced over the past three years, but efforts to address the prevalence of illegal drugs still need to be intensified. In terms of external security, successful negotiations for the formulation of the ASEAN-China Code of Conduct in the South China Sea is seen to ensure security and stability in the region. Moving forward, the government will continue to strengthen the capabilities of its security forces to ensure that the Philippine territory and sovereignty is defended. It also remains committed in its campaign against all forms of criminality, illegal drugs, transnational crimes, trafficking-in-persons, and violent extremism. During times of health emergencies, the whole of the security sector will be mobilized to adequately respond to the needs of the people, including the provision of support to sectors that bring food, basic necessities, and essential services to them.

Accelerating Infrastructure Development (Chapter 19) aims to support a higher growth trajectory and improve the quality of life in both urban and rural communities. It will plug the infrastructure gap to catch up with peers in the ASEAN region. Since 2017, the country's infrastructure development has been continuously founded on a robust pipeline of forward-looking infrastructure projects through the BBB agenda. In 2018, infrastructure spending exceeded the benchmark 5 percent of GDP which is twice the average spending over the past five decades. However, the challenges brought by the pandemic will alter the overall infrastructure development agenda. The resource requirements of the response to the pandemic is expected to reduce the fiscal space initially allotted for the portfolio of investments and could slow down the movement and implementation of programs and projects. Accordingly, the government reassessed its strategies and targets for the remaining Plan period to ensure that these remain relevant and achievable in the face of the new and better normal and in pursuit of a healthy and resilient Philippines. Even while facing constraints brought about by the pandemic, the government will remain mindful of the long-term development goals requiring early interventions.

Ensuring Ecological Integrity, Clean, and Healthy Environment (Chapter 20) guarantees an ecosystem that provides services; supports growth and performance of other services including agriculture, fisheries, industry, and services; and provides livelihood especially to resource-dependent communities. The pandemic and the mobility restrictions that were imposed have redirected attention to the most basic needs of air quality and food, and how these relate to human health. Hence, the shift towards sustainable development has now become an urgent matter of survival. Building on the reforms and accomplishments in the past three years of Plan implementation, the government will continue to improve the state of the environment and natural resources. Alongside this is increasing the resilience of resource-dependent and vulnerable communities against the converging risks arising from natural and biological hazards under a changing climate. The sector's goals and targets will be realized by addressing the long-standing issues on governance, monitoring, and evaluation.

Protecting the Rights, Promoting the Welfare, and Expanding Opportunities for Overseas Filipinos (OFs) (Chapter 21) focuses on the special circumstances of OFs and their families, and aims to empower OFs towards inclusive and sustainable development. From 2017 to 2019, there have been significant developments in International Migration and Development (IMD). For this PDP midterm update, a separate chapter on IMD has been added to ensure greater coherence and comprehensiveness in discussing issues, relevant indicators, and strategies

for OFs while upholding the commitments under the Global Compact for Safe, Orderly, and Regular Migration. With the COVID-19 pandemic and the subsequent global recession, the unprecedented volume of OFs who lost their jobs has heightened the government's efforts in supporting repatriated and returning OFs, and those who remain overseas. The capacity of OF-serving agencies are being scaled up to be able to serve and assist affected OFs. Further, the government is conducting skills retooling and upgrading programs, employment assistance, and short-term employment programs to facilitate local re-employment of OFs who have returned. The pandemic has highlighted the urgency of strategies already being pursued by the government in the first three years of the Plan implementation: (a) protecting the rights and improving the well-being of OFs; (b) facilitating the reintegration of returnees and expanding opportunities for OFs to participate in the country's development; and (c) strengthening OFs' engagement in governance.

The succeeding chapters will provide specific details for each strategy per pillar. Each chapter begins with an assessment of previous accomplishments and the lessons learned. This is followed by an enumeration of the medium-term targets, noting those indicators and targets that have been duly revised. The specific strategies and legislative agenda to meet these targets are then elaborated.

PART II

**BUILDING A
HIGH-TRUST
SOCIETY
(“MALASAKIT”)**

05 Ensuring Responsive, People-centered, Technology-enabled, and Clean Governance



Ensuring Responsive, People-centered, Technology-enabled, and Clean Governance

Transparent, accountable, and effective institutions enable efficient delivery of public services and generate high public trust, which are crucial in achieving a healthy and resilient Philippines. In the first half of Plan implementation, significant accomplishments in the governance sector came in the form of the enactment of several laws that will improve the way the government delivers its services to the people. In light of the COVID-19 pandemic, the government will expedite its shift to digital platforms for citizen engagement, service delivery, capacity building, and accountability mechanisms.

For the rest of the Plan period, reforms will focus on: (a) proactively seeking citizens' perspectives to ensure the responsiveness of government interventions; (b) expediting the implementation of the Ease of Doing Business and Efficient Government Service Delivery (EODB-EGSD) Act of 2018 (Republic Act [RA] 11032) and the Philippine Identification System (PhilSys) Act (RA 11055); (c) building the capacities and preparing systems of local government units (LGUs) for the implementation of the Supreme Court (SC) ruling in the *Mandanas* case (General Register No. 199802, July 3, 2018);¹ (d) formulating public service continuity plans; and (e) tapping technologies to strengthen anti-corruption mechanisms.

Assessment and Challenges

Assessment: Major reforms in the governance sector have brought about increased access to and quality of frontline services. Legal frameworks have been institutionalized, such as the EODB and EGSD Act and PhilSys Act to streamline processes and increase access to government services. Initiatives to automate processes are also being implemented for transactions between government and businesses, government and citizens, and government and government.

For instance, some LGUs adopted electronic business permit and licensing systems. The validity of the passport was extended to 10 years. The National Economic and Development Authority (NEDA) has developed the Public Investment Program Online (PIPOL) System for submission of programs and projects.

Challenges: Physical distancing measures necessitate the adoption of alternative work arrangements and

¹ The ruling significantly expands the tax base for LGUs' share in national taxes to include not only national internal revenue taxes but also customs duties and fees.

digital transactions, which require the revision of existing government rules and regulations. With the increasing use of online forms of citizen engagement and the use of big data analytics, the rise of fake news and misinformation, lapses in transparency, and issues on human rights pose challenges in strengthening social cohesion. Relatedly, these

online platforms demand that the government establish security mechanisms against incidences of cybercrimes and cyberattacks. With the greater role of the LGUs, as first responders and frontline service delivery units in times of crises, their varying levels of institutional capacity, readiness, and leadership affect the pace of delivering services.

Targets

Targets are retained for the rest of the Plan period except for the Worldwide Governance Indicator (WGI) - Regulatory Quality² and the Global Competitiveness Index (GCI),³ which were lowered by one percentile rank due to the economic contraction caused by the pandemic and based on the historical performance of the country. The United Nations' (UN) Global e-Government

Development Index (EGDI) was included as a new indicator to capture the progress in the adoption of e-governance, which is crucial in the new normal. Scores on global indicators will also be reported to monitor progress of the country's year-on-year performance.

Table 5.1 Updated Plan Targets to Ensure Responsive, People-centered, Technology-enabled, and Clean Governance

INDICATOR	BASELINE VALUE (YEAR)	TARGETS			
		2020*	2021	2022	END OF PLAN
Sector Outcome: Responsive, people-centered, technology-enabled, and clean governance					
Score in the national governance index improved	None (2015)	Increasing	Increasing	Increasing	Increasing
Subsector Outcome: Participatory governance broadened					
Percentile ranking in the WGI – Voice and Accountability improved	51 (2015)	60	60	60	60
Open Budget Index score improved	64/100 (2015)	67/100	71/100	71/100	71/100

² The WGI-Regulatory Quality captures perceptions on the ability of government to formulate and implement sound policies and regulations that permit and promote private sector development. Given the economic slowdown due to the impact of COVID-19 and enhanced community quarantines, it is expected that there will be reduced private sector development. Thus, the targets were decreased.

³ The Global Competitiveness Report analyzes competitiveness along 12 pillars: institutions, infrastructure, macroeconomic environment, health and primary education, higher education and training, goods market efficiency, labor market efficiency, financial market development, technological readiness, market size, business sophistication, and innovation. Given the economic contraction brought by the pandemic, the targets were lowered.

INDICATOR	BASELINE VALUE (YEAR)	TARGETS			
		2020*	2021	2022	END OF PLAN
Subsector Outcome: Seamless service delivery ensured					
Percentile ranking in the WGI – Regulatory Quality sustained	52 (2015)	60	59	59	59
Percentile ranking in the GCI sustained	59 (2016)	62	61	61	61
Score in the Global e-GDI improved	0.6/1.00 (2016)	0.7/1.0	N/A	0.7/1.0	0.7/1.0
Percentile ranking in the WGI – Government Effectiveness improved	57 (2015)	60	60	60	60
Subsector Outcome: Public accountability and integrity strengthened					
Percentile ranking in the WGI – Control of Corruption improved	40 (2015)	50	50	50	50
Percentile ranking in the Corruption Perceptions Index (CPI) improved	43 (2015)	50	50	50	50
Score in the CPI improved	35/100 (2015)	37/100	38/100	38/100	38/100

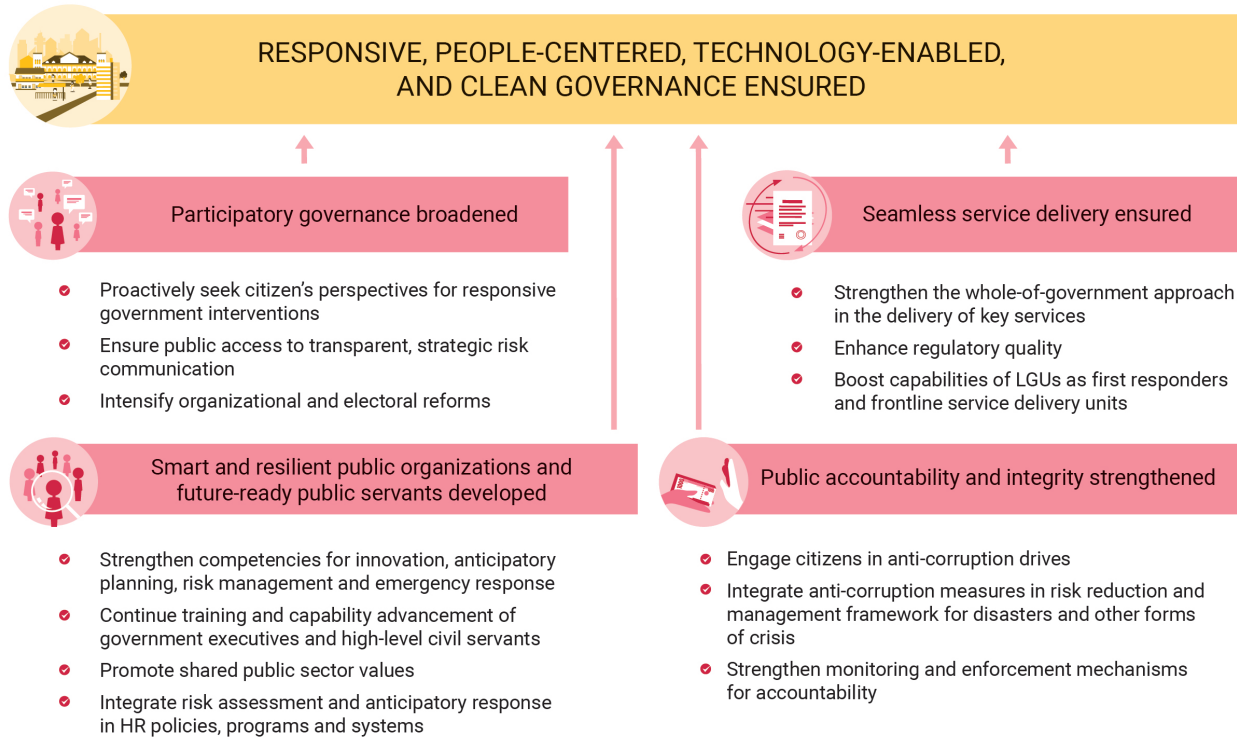
*2020 original targets set/approved in 2016/prior to the pandemic retained

Strategic Framework

The revised strategic framework (see Figure 5.1) maintains a culture-sensitive perspective, gender-sensitive paradigm, and rights-based approach to public service. The framework has been expanded to mainstream technology across all subsector outcomes and to improve the agility of the government to adapt to the new normal. Further, a whole-of-society approach will be implemented to strengthen convergence in achieving the sectoral outcomes. Rather than looking at each subsector outcome as agency-led initiatives, for the rest of the Plan period, greater coordination and complementation amongst agencies and non-government sectors will be pursued to drive the achievement of these outcomes.

Specifically, the government will: (a) sustain the automation of government processes for corruption-free, people-centered delivery of services through the full implementation of the EODB and EGSD Act; (b) increase the people’s access to these services through reconfigured government systems pursuant to the PhilSys Act; and (c) strengthen the capacities of the LGUs, civil society organizations (CSOs), and other local stakeholders to ensure readiness for the implementation of the *Mandanas* case ruling in the midst of other multidimensional risks.

Figure 5.1 Strategic Framework to Ensure Responsive, People-centered, Technology-enabled, and Clean Governance



Strategies

At the national level, the NEDA and the Philippine Statistics Authority (PSA), with other agencies, will develop and institutionalize a National Governance Index (NGI). The NGI will consider relevant Sustainable Development Goal (SDG) 16⁴ indicators and other measures of governance and competitiveness.

Relatedly, a monitoring and evaluation (M&E) system for the sector will also be institutionalized to track the accomplishments and challenges in the sector and to formulate strategies that will address bottlenecks. A standard way of collection, organization, and analysis of indicators will also be developed and prescribed so that indicators

for each program, project, and initiative can be mined for higher-level analysis (if possible) and future planning.

To enhance anticipatory planning, the government will conduct ex-post evaluation of the various interventions rolled out during the imposition of the enhanced community quarantine (ECQ) and general community quarantine (GCQ) to determine lessons learned, share best practices across different agencies and the LGUs, and influence future policies.

⁴ SDG 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all, and build effective, accountable, and inclusive institutions at all levels.

Broadening participatory governance

The government will promote a culture of informing, engaging, and empowering citizens. Thus, adequate and genuine representation of civil society in local development councils and other advisory bodies will be ensured. Response and feedback mechanisms will also be localized and expanded. Electoral reforms will be intensified while observing risk mitigation protocols for the citizenry.

Government programs, projects, and public policies will be made more inclusive and responsive to the needs of the different sectors. The government will ensure that overseas Filipinos, micro, small, and medium enterprises (MSMEs), and the vulnerable and marginalized sectors, such as indigenous groups (IPs) and persons with disability, are involved in development planning. Frontline agencies will be trained on mainstreaming human rights-based approach to development planning to enable them to assist and provide the public with better government services.

Proactively seek citizens' perspectives for responsive government interventions. Agencies will proactively solicit comments and suggestions from citizens using a three-pronged approach: (a) providing adequate venues for engagement; (b) communicating in clear language; and (c) collaborating with other sectors. The “outside-in” approach⁵ will be adopted by actively listening to the people and understanding their needs and expectations. This brings the voice of the citizens into the decision-making for and design of public services. Several platforms will be provided to enable ordinary citizens to take an active role in information sharing, public resource management, policy and regulation review, and other related processes. A whole-of-society approach in national and local planning will be instilled.

The government will develop programs for people to participate in the promotion of citizen empowerment in their respective locality. Platforms will be provided to enable citizens and CSOs to participate in local government processes such as development planning, budgeting, implementation, and M&E. Development of mobile apps, utilization of media platforms, and application of geotagging technologies will also be implemented to facilitate broader participation such as Development Live (DevLive).⁶ With the institutionalization of the Citizen Participatory Audit (CPA), citizens and LGUs will be capacitated on the auditing process and the importance of CPA in minimizing corruption and enhancing public accountability.

Furthermore, these initiatives will be implemented:

- **Encourage volunteerism to promote shared responsibility and accountability in achieving development goals.** The government will reinforce and strengthen the practice of volunteerism in the delivery of social services, provision of technical assistance, response to disaster, and undertaking humanitarian efforts, especially in remote and unserved areas. Encouraging volunteerism will also be explored as a criterion in the Seal of Good Local Governance (SGLG).
- **Ascertain the functionality and quality of local special bodies.** Further advocacy will be conducted to encourage more CSOs to apply for accreditation, as outlined in the Department of the Interior and Local Government's (DILG) Memorandum Circular No. 2019-72.⁷ Existing guidelines of other agencies on CSO accreditation will also be harmonized. The selection process and criteria for CSO members will be upgraded to ensure unbiased and fair representation in local special bodies.

⁵ An approach where service providers place themselves in the position of their clients and view themselves from their clients' perspective. In this manner, services will be designed to be more responsive and easily accessible to the clients.

⁶ Developed by the DILG and the United Nations Development Programme (UNDP), DevLive is a mobile application where citizens can report status of projects in their communities that allows greater transparency, accountability, and efficiency in the implementation of government infrastructure projects.

⁷ Guidelines on the accreditation of CSO and selection of representatives to the local special bodies, which became effective starting June 11, 2019.

Further, the DILG will capacitate and evaluate the functionality of these bodies to ascertain the legitimacy of representatives and sectoral concerns in the planning process.

- ***Upscale existing governance initiatives.*** The government will continue to implement and upscale efforts in fulfilling the commitments to the Open Government Partnership (OGP) Action Plans and Participatory Governance Cluster Performance and Projects Roadmap (2017-2022). Best practices from the partnership will be shared with other government agencies through the conduct of regular, online peer learning sessions. The national government will also develop and issue a unified policy on citizen engagement in governance to consolidate fragmented guidelines, institutionalize best practices, and ensure sustainability of existing open and participatory governance reforms. To complement these mechanisms, national agencies will sustain compliance with the Transparency Seal. Agencies will also engage and partner with the private sector, academe, civil society, and other stakeholders for service innovations, technologies, and research and development.

Ensure public access to transparent, strategic risk communication. The government will continue to pursue the passage of the Freedom of Information (FOI) Bill to enable the public to have access to government data through online means, among others, free of charge and in an open format. With the right information, the public can provide insights and possible solutions that the government can use in crafting policies, plans, programs, and projects. Specific initiatives include:

- ***Mainstream the use of technology in informing, consulting, involving, collaborating, and empowering citizens.*** Adequate information and communications technology (ICT) infrastructure will be pursued through provision of free Wi-Fi access in all public places and rollout of programs included in the Department of Information and Communications Technology's (DICT) e-Government Masterplan.

The National Government (NG) and the LGUs will maximize the use of online platforms to provide timely and responsive public information including policies, advisories, statistics, and other government data. At-a-glance, information on government services will also be provided in a comprehensive, accessible, and timely manner.

Aside from these, the government will utilize other platforms to reach a wider audience and engage citizens to generate more feedback on the quality of government services. These platforms include social media, text messaging, call centers, and mobile apps, which will be institutionalized at the local level, as much as possible. Crowdsourcing will be explored as another form of public consultation, while collaboration with non-government sectors will be facilitated. Mechanisms will be improved and simplified to ensure that the feedback loop is closed – citizens who submit complaints must be given real-time updates on their issues to show that their concerns matter.

The Report Card Survey (RCS), now under the Anti-Red Tape Authority's (ARTA) purview, will be expanded and revamped to incorporate more measures of citizen satisfaction using a leaner, simpler tool. This will allow the identification of priority areas for service improvement, comparison, benchmarking across agencies, and recognizing best practices for replication. The RCS will be cross-referenced and, if possible, harmonized into a single survey with other existing stakeholder satisfaction surveys such as the Development Academy of the Philippines' (DAP) Customer/Business/Stakeholder Satisfaction Surveys and the DILG's Citizen Satisfaction Index System.

- ***Develop and implement a framework for privacy, personal data protection, and security in the use and application of ICT.*** While programs for an ICT-enabled government are being accelerated, the government will also ensure that data privacy rights of citizens remain protected under these e-programs. Safeguards against cybercrimes and data privacy breach will be enhanced by strengthening the capacity

of the DICT. The government will also revisit the Data Privacy Act of 2012 (RA 10173) to examine its safety measures and determine its sufficiency in balancing concerns on data privacy and public welfare. Privacy impact assessment will be conducted with guidance from the National Privacy Commission (NPC). Data sharing agreements will be enforced to facilitate information sharing, where possible.

Intensify organizational and electoral reforms.

Spearheaded by the Commission on Elections (COMELEC), the government will push for political and electoral reforms to integrate new election protocols such as, but not limited to, automation and online system of voter registration, digitization of voters' list, enhancement of voting measures for senior citizens and persons with disabilities, and establishment of additional polling places for indigenous groups (*see also Legislative Agenda*). Rules and regulations on party-list development, anti-political dynasty, and campaign financing will also be pursued.

To ensure a more responsive and resilient electoral process, appropriate risk mitigation measures against COVID-19, or any other pandemic, will be developed for the 2022 elections. Voter education activities will be intensified to include information on safety protocols during elections. Similar to previous initiatives, there will be partnership with state universities and colleges (SUCs) and open universities for the development of education modules and dissemination of information. Online platforms will also be utilized to inform voters.

Ensuring seamless service delivery

All of government will be engaged in streamlining policies, processes, and procedures, while ensuring interoperability to facilitate the shift towards e-governance. Better service delivery strategies and new programs will be co-created among related agencies, relevant stakeholders, and citizens.

Strengthen the whole-of-government approach in the delivery of key services. A whole-of-government approach entails interoperable government processes and systems in delivering key services (e.g., provision of healthcare, access to basic social services, and utilization of the PhilSys, among others). Effective service delivery to overseas Filipinos (OFs) will also be pursued (*see Chapter 21*). Coordination among the NG, the LGUs, private sector, and civil society will be enhanced by automating systems and linking government services. To increase public satisfaction and confidence in the government, initiatives will be implemented on the use of evidence-based service quality standards, performance excellence, and best practices in citizen-centered public service delivery. Complementing efforts at the national level, LGU capacities on the implementation of infrastructure projects and the delivery of devolved services will also be enhanced to take advantage of the increase in their resources following the *Mandanas* case ruling. A communication, outreach, and standards development for devolved services and roadmap to manage the transition will be formulated and implemented by the time the ruling takes effect in 2022.

Aside from these, the following initiatives will be pursued:

- ***Expedite implementation of the EODB and EGSD Act.*** Implementation of the law must cover the: (a) issuance and extension of validity of permits and licenses; (b) reduction in the number of signatories and requirements; and (c) use of online filing and payment platforms of government agencies. As much as possible, government procedures and processes will be automated through either full migration to online systems or utilization of a common platform such as the National Government Portal (NGP). This platform will also include a standard, full suite of common government processes (i.e., human resource management and procurement) to minimize duplication of efforts by various agencies. The ARTA will be fully operationalized and agencies will be trained to identify transaction complexity

of government procedures for appropriate response times.

- ***Fast-track the digitalization of frontline services and contactless transactions with the government.*** Digitalization will entail electronic and paperless systems, zero-contact policies, online transactions, and new channels for service delivery. The government will invest in ICT to enable remote government operations and to strengthen and harmonize existing online platforms. Aside from preparing the necessary ICT infrastructure, the DICT will also fast-track the implementation of its Digital Government Program to develop key solutions for national government agencies (NGAs) and the LGUs that will enable them to remotely perform their mandates and implement their programs, projects, and activities. These include providing reliable and secure connectivity, collaboration tools, videoconferencing applications, cloud platforms, cloud hosting, and digital signatures. Moreover, the DICT will enforce the Philippine e-Government Interoperability Framework (PeGIF) which defines a common language, principles, and standards that the NGAs should adopt in designing their technology-enabled platforms to ensure cohesion of ICT systems for the whole of government.
- ***Accelerate the implementation of PhilSys.*** As registries of program beneficiaries and the use of digital payments have become critical in this new normal, implementation of PhilSys will be accelerated by increasing registration kits. To achieve its targeted registration of 116 million population by 2023, the PSA will fast-track the completion of registration guidelines and protocols, recruitment and training of field registration personnel, and establishment of registration centers. Use cases for the issued identification (ID) called the PhilSys ID, will be identified, particularly in facilitating more efficient provision of key services (e.g., pension, conditional cash transfer, farmer assistance, health coverage, among others). A primary use case, especially for low-income households, is

bank account opening/ownership for which PhilSys ID will be an acceptable proof of identity. To facilitate this, bank account opening will be co-located with registration areas. Further, functionality of PhilSys will also be harnessed in the development of the country's digital economy through its secure identification and verification platforms.

- ***Implement the community-based monitoring system (CBMS).*** As provided for by the CBMS Act (RA 11315) and the recent promulgation of its implementing rules and regulations (IRR),⁸ the CBMS will be conducted to ensure that the LGUs have regularly updated facts, figures, and maps on the different dimensions of poverty at the local level. Given current health and safety protocols, such conduct must be done through computer-assisted personal interviewing. The NG and the LGUs will utilize CBMS-gathered data for seamless and targeted distribution of social assistance and other public services. The PhilSys will be integrated with the CBMS to harmonize LGU data and further streamline administrative processes.
- ***Formulate and enforce national and local preparedness and response frameworks for disease outbreaks and pandemics.*** Existing frameworks for disaster risk reduction and management (DRRM) and crisis management at the national and local levels will be updated and harmonized based on robust assessment, surveillance, and monitoring of hazards, risks, and diseases. The IRR of the Philippine DRRM Act of 2010 (RA 10121) will be revised to explicitly identify public health emergencies such as pandemics in the definition of disaster events. These frameworks will be enforced at the local level to ensure proper planning and implementation of interventions intended to address health and other state emergencies.

Enhance regulatory quality. The EODB and EGSD Act institutionalizes the regulatory impact assessment (RIA) in the bureaucracy, which mandates the thorough review of regulations

⁸ Signed and approved on May 20, 2020.

prior to their issuance. Other reforms will also be intensified to reduce unnecessary regulatory burden while simplifying processes:

- **Expand the National Effort for the Harmonization of Efficient Measures of Inter-related Agencies (Program NEHEMIA) for the pursuit of a whole-of-government approach to service delivery.** Program NEHEMIA will be sustained to supplement efforts in eliminating red tape in the government by reducing time, cost, requirements, and procedures in sectors of economic and social significance by 52 percent within 52 weeks. Its scope will be expanded to other sectors taking off from the first phase, which included common tower and connectivity, housing, food and pharmaceutical, logistics, and the energy sectors.
- **Reduce administrative burden within the government.** To support remote government operations, oversight agencies, such as the Department of Budget and Management (DBM), the Government Procurement Policy Board (GPPB), the Commission on Audit (COA), and the Civil Service Commission (CSC), among others, will review and rationalize their rules, regulations, and requirements to allow for electronic transactions, alternative work arrangements, and procurement of off-the-shelf software⁹ in the public sector. This likewise applies to intra-agency documentary requirements of offices.

Pre-existing issues with the IRR of the Government Procurement Reform Act (RA 9184) (e.g., tedious process) and the COA rules (e.g., uniform application) will be addressed through the review and amendment of these regulations, as necessary, while making these responsive to the new normal.

There will also be a review of agency-specific and sector-wide policies to improve internal and sectoral efficiency. At the local level, a standard checklist will be developed containing

the services that must be complied with by LGUs based on existing laws and issuances. This checklist can then be used by the DILG for the SGLG, by constitutional bodies for the exercise of their functions, and by Congress for policy triggers.

- **Accelerate the adoption of RIA.** Priority will be given to the development of a national and sectoral framework for RIA, including the drafting of proportionality analysis guidelines. Regulatory agencies, the legislative branch, the LGUs, and the decision-makers will be trained to undertake RIA. Courses on compliance cost assessment and public consultation will also be conducted to support an effective RIA implementation. Online training and assessment platforms will be developed in this regard.
- **Revisit and strengthen the results-based performance management.** The Results-Based Performance Management System (RBPMS) will be intensified by refining performance measurements, strengthening M&E systems of performance targets, and making the link to performance incentives more explicit. The criteria and conditions of the performance-based bonus (PBB) will complement the desired reforms (e.g., digitization, contactless transactions, and productivity increase) and the achievement of desired sectoral, societal outcomes, and results that are relevant to ordinary citizens. In particular, the possibility of delinking the RBPMS from the PBB will be explored. Organizational rewards such as capital investments will be granted rather than individual incentives to encourage agency-wide collaboration. Further, information on the rationale of the PBB as a reform measure to improve performance and productivity both at individual and organizational levels will be cascaded.

Boost capabilities of the LGUs as first responders and frontline service delivery units. In a time of crisis, program convergence

⁹ Regular procurement rules will apply after the *Bayanihan* Act lapses in effectivity.

and coherent coordination between and among the NG, the LGUs, private sector, and CSOs, are crucial particularly in transitioning to the new normal. Proper change management on the devolution of services will be observed through collaboration between various government agencies and the LGUs, and timely dissemination of information to the LGUs. This includes a review of national policies and regulations such as auditing rules for more effective control mechanisms, pertinent provisions of the Local Government Code, and position qualification standards for capacity issues.

The government will craft the transition plan for implementing the Supreme Court (SC) ruling in the *Mandanas* case, which, upon its rollout, will provide the LGUs greater access to funds to implement devolved services. Guidelines on the use of the internal revenue allotment (IRA) for development projects will also be revisited to facilitate investments in community health programs and facilities. In light of disruptions to local economies, the LGUs will be empowered to shift towards new income opportunities and revive local industries as early as 2021 and update their Local Investments and Incentives Codes accordingly.

The LGU capacities on forward planning, budgeting, implementing, monitoring, and evaluating government projects, such as infrastructure, and the delivery of devolved services will be enhanced. In this regard, the NEDA will take on a bigger role by working with the DILG, the DAP, different SUCs, the Local Government Academy (LGA), and other training institutions to deliver the necessary training and other capacity development interventions. The DILG will also ensure that the LGUs are provided with necessary capacity development to prepare them for bigger responsibilities and accountability given their increased share from the national wealth.

Developing smart and resilient public organizations and future-ready public servants

Capacity-building interventions and infusion of technology in human resource (HR) management will enable smart and resilient public sector organizations as well as develop and sustain a corps of smart and future-ready public servants. The advent of the Fourth Industrial Revolution (FIRe) entails the automation of HR processes and the integration of HR systems that are aligned with government masterplans. Essential to these will be the development of a bureaucracy-wide HR Management Information System (MIS), propelling a shift from transactional to strategic HR management.

Strengthen competencies for innovation, anticipatory planning, risk management, and emergency response. Since the new normal is characterized by volatility and uncertainty, public sector organizations need to be agile and future-ready, with strong adaptive capacity. To ensure productivity of the public sector, initiatives will focus on fostering innovation and futures thinking. Public sector organizations will be assisted in applying design-thinking principles and strategic foresight tools. These interventions will be complemented with institutionalizing better knowledge management practices and encouraging knowledge sharing and collaboration between agencies. Online modules and training on risk management and emergency response will be developed and provided to civil servants to cope with the new normal.

Comprehensive and multimodal learning opportunities will also be provided for public managers, high level officials, and local chief executives through the DAP's Public Management Development Program. The DAP will likewise continue its Capability Building on Innovative Leadership for Legislative Staff Program, which aims to capacitate senior executives, managers, and technical staff members of the Legislative branch.

To optimize investment in HR development, the Philippine Civil Service Academy (CSA) will be fully reactivated, which, under Presidential Decree (PD) 1218, will be responsible for the planning, formulation, and implementation of training and other career development programs for first and second level positions of the career service. The CSA will also formulate policies that will govern all locally- and foreign- funded scholarship programs in the government.

Various forms of alternative learning and technology-enabled platforms in enhancing capacities and competencies of local chief executives will be explored in preparation for the increase in LGU expenditure responsibilities due to the full implementation of the *Mandanas* case ruling in 2022. The DILG and the LGA will work with the NEDA in conducting training programs on policy, planning, programming, budgeting, implementation, and M&E of devolved services and the basic standards of service delivery.

Continue training and capability advancement of government executives and high-level civil servants. The government will maintain an efficient and talented bureaucracy, promote innovation, teamwork, reform-orientation, and outcome focus among government personnel, and break the silo mentality. These will be done through a Career Executive Service Development Program for government, such as the Public Management Development Program, the Leadership Certification for Middle Managers, and the Public Financial Management Competency Programs. Third-level officials will be encouraged to complete the Leadership and Management Proficiency Program under the Career Executive Service Board (CESB).

Promote shared public sector values. A whole-of-government and whole-of-society National Values Formation Program will be implemented by the government to address the anticipated changes in behavior and level of social trust. Values-related training programs for civil servants such as the *Alay sa Bayan*, Public Service Ethics and Accountability, and values orientation workshop will be harmonized to

ensure consistency and quality of trainings. Development of these modules will also be cross-referenced with the results of the National Values Survey commissioned by the NEDA and the Study on Filipino Values commissioned by the National Commission for Culture and the Arts (NCCA) to ensure that Filipino values are integrated in all levels of civil service. The Public Service Values Program will be revisited to strengthen inculcation of patriotism, integrity, excellence, and spirituality in public servants and officials (*see also Chapter 7*). The CSC will tap accredited learning and development institutions in the conduct of these values-oriented interventions. Technology-enabled platforms will be widely used to raise awareness on civil service values and norms.

Integrate risk assessment and anticipatory response in HR policies, programs, and systems.

To ensure that gains and developments in the government are guarded from disruptions caused by crises, the government agencies will formulate and rehearse their public service continuity plans. Occupational safety and emergency response standards in the government will be enforced to keep the workforce intact, productive, and motivated. In crafting these continuity plans, relevant stakeholders will be engaged and consulted to ensure their buy-in and support to the implementation of these plans.

Current HR policies, programs, and systems will be reviewed and revised to ensure responsiveness to current times. Alternative or flexible work arrangements will be institutionalized, with appropriate control and performance management mechanisms. Adequate resources and other support mechanisms will also be provided to ensure viability of these work arrangements. HR management systems of the CSC will also be modernized to adapt to the transformation to digital economy. This entails establishment of a single comprehensive HR MIS that will utilize digital tools for HR data analytics and support decision-making by the CSC. This will enable the Commission to better and more effectively manage civil service nationwide.

Strengthening public accountability and integrity

The remaining Plan period will focus on intensified inter-agency and whole-of-society efforts in reducing corruption through education, prevention, and enforcement.

Engage citizens in anti-corruption drives.

Public awareness will be enhanced through continuous collaboration with the non-government sector (e.g., academe, media, and civil society) and the use of technology-enabled platforms (e.g., social media). By providing appropriate and adequate mechanisms for citizens to report incidences of corruption, citizens' active involvement in the campaign against corruption will be heightened. To this end, the mobile and web platforms of Hotline 8888 will be reinforced, while reporting tools will be simplified. A quick response system will also be established to build public trust by providing simplified reporting tools in various delivery modes, channels, and platforms. Whistleblowing programs of agencies will also be strengthened by increasing incentives and protection for whistleblowers.

Integrate anti-corruption measures in risk reduction and management framework for disasters and other forms of crisis.

The government will conduct corruption risk assessments of disaster and crisis preparedness and response. In this regard, Internal Audit Service units of government agencies will be capacitated to ensure effective control systems in the bureaucracy. Safeguards will be installed to protect the integrity of systems and mechanisms, such as utilizing technology for the disbursement of resources.

Previous prevention measures will be continued such as the country's commitment to the UN Convention against Corruption, other anti-corruption programs (e.g., Integrity Management Program), and existing transparency initiatives (e.g., Full Disclosure Policy, Transparency Seal, and Citizen's Charter).

Strengthen monitoring and enforcement mechanisms for accountability.

Anti-corruption laws and issuances will be fully enforced, especially with the enactment of the EODB and EGSD Act that penalizes civil servants found guilty of bribery. To expedite processing of cases and other administrative processes for corruption incidents and allegations, agencies will utilize technologies to automate complaints filing and evaluation, case management, and case inventory, among others. Administrative investigations for corruption incidents and allegations will also be streamlined.

Citizen empowerment efforts and capacity-building activities for non-government organizations and other volunteers on monitoring and public accountability will also be strengthened and expanded through open and participatory governance programs. The DILG's *Bantay Korapsyon* Program will mobilize citizens and utilize various anti-corruption mechanisms at the local level to ensure that erring local officials will be held accountable for committing corrupt practices and failure to perform their mandated functions.

Legislative Agenda

For the rest of the Plan period, the following legislative agenda will be pursued:

Table 5.2 Legislative Agenda to Ensure Responsive, People-centered, Technology-enabled, and Clean Governance

LEGISLATIVE AGENDA	RATIONALE
Participatory governance broadened	
Freedom of Information (FOI) Act	This will address transparency issues on government data, thereby promoting meaningful and increased participation of the people in government decision-making and public accountability.
Review of the Voter's Registration Act of 1996 (RA 8189), Automated Election System Act (RA 9369 amending RA 8436), and Fair Elections Act (RA 9006)	This will allow for online registration and online voting, and facilitate risk mitigation procedures for the 2022 National and Local Elections.
Seamless service delivery ensured	
Budget Modernization Act	This will support the expansionary fiscal policy of the government in response to COVID-19 through (a) streamlining the cash budgeting system; (b) strengthening the Bureau of the Treasury's (BTr) oversight function over government bank accounts; (c) providing the legal basis for upholding the validity of online financial transactions; (d) giving the DBM its power over internal audit standards; and (e) instituting participation in government budgeting.
National Planning and Development Act	This will strengthen horizontal and vertical coherence of policies, plans, and programs among agencies and across administrative units, as well as the functional translation of plans into investment programs, budget, and implementation.
Smart and resilient public organizations and future-ready public servants developed	
Amendments to the Telecommuting Act of 2018 (RA 11165)	This will institutionalize flexible and alternative working arrangements for employees in the public sector providing non-frontline public services.

06

Pursuing Swift, Fair, and Humane Administration of Justice



Pursuing Swift, Fair, and Humane Administration of Justice

In pursuit of swift and fair administration of justice, the Philippine Development Plan (PDP) 2017-2022 outlines strategies aimed at enhancing the country's civil, criminal, commercial, and administrative justice systems and improving efficiency and accountability in the justice sector. The gains achieved during the past three years set the stage for further improvements in terms of the institutional, policy, and process framework of the justice system.

Access to justice and the protection of human rights are fundamental outcomes that need to be guaranteed in order to protect and improve the well-being of Filipinos.

In light of the COVID-19 pandemic, the government will maximize the use of digital platforms to ensure swift, fair, and humane administration of justice. It will further strengthen the coordination and cooperation among justice sector agencies, and continuously streamline and improve processes within the different pillars of the justice system.

Assessment and Challenges

Assessment: Streamlined processes, increased human resources and courts, increased jail and prison personnel and improved facilities, revised judicial rules and procedures, and sector-wide collaboration resulted in higher case disposition rates. These were complemented by information and communications technology (ICT)-enabled systems. Improvements in the legal framework were made through legislative and executive actions relative to the criminal justice system. With the onset of the COVID-19 pandemic, justice sector agencies will increasingly rely on ICT to facilitate access to justice particularly on the conduct of judicial and investigation procedures.

Challenges: Congestion of case dockets and penal facilities and other resource deficiencies are among the most critical challenges in the justice system, particularly affecting the provision of timely and effective remedy and resolution of cases. The COVID-19 pandemic highlighted the persisting problem of overcrowding in jails and prisons and the need to strictly enforce health and safety protocols in penal facilities. Addressing these concerns is essential towards achieving a responsive, humane, and inclusive justice system.

Targets

The country's performance in the World Governance Indicator and World Justice Project Rule of Law (WJP-ROL) Index will continuously be monitored. For the PDP 2017-2022 midterm update, the core indicators are rearranged in line with the updated

strategic framework of the sector. Original targets for the percentile rank of the core indicators were retained. Country scores in WJP-ROL sub-indicators were also added as targets.

Table 6.1 Updated Plan Targets to Pursue Swift, Fair, and Humane Administration of Justice

INDICATOR	BASELINE VALUE (YEAR)	TARGETS			
		2020**	2021	2022	END OF PLAN
Subsector Outcome: Criminal, civil, and economic justice processes ICT-enabled and streamlined					
WJP-ROL Index improved					
<i>Sub-indicator on Fundamental Rights improved</i>					
Percentile rank	26.55 (2016)	28.00	29.00	29.00	29.00
Score	0.50 (2016)	Increasing	Increasing	Increasing	Increasing
<i>Sub-indicator on Civil Justice improved</i>					
Percentile rank	23.01 (2016)	25.00	27.00	27.00	27.00
Score	0.45 (2016)	Increasing	Increasing	Increasing	Increasing
<i>Sub-indicator on Criminal Justice improved</i>					
Percentile rank	25.66 (2016)	27.00	29.00	29.00	29.00
Score	0.36 (2016)	Increasing	Increasing	Increasing	Increasing
Subsector Outcome: Sector efficiency and accountability improved					
Percentile rank in the World Governance Indicator - Rule of Law improved	43.27 (2015)	46.00	50.00	50.00	50.00

*2020 original targets set/approved in 2016 prior to the pandemic retained

Strategic Framework

The revised strategic framework (see Figure 6.1) supports the pursuit of a whole-of-sector approach and streamlined interdependence among the justice sector institutions. Additional emphasis is given to the pursuit of a more humane justice system.

The government will sustain current reforms being undertaken, and strengthen existing structures and systems. These will be done by (a) sustaining and institutionalizing justice sector coordination

and program convergence at the national and local levels; (b) further increasing human resources and courts to enhance access to justice; (c) pursuing ICT-enabled systems to streamline or harmonize processes and facilitate information sharing; (d) expanding and maximizing the use of Alternative Dispute Resolution (ADR); and (e) addressing congestion in penal facilities through infrastructure development and expedient criminal justice processes.

Figure 6.1 Strategic Framework to Pursue Swift, Fair, and Humane Administration of Justice



Strategies

Streamlining ICT-enabled criminal, civil, and economic justice processes

Streamline processes for speedy resolution of criminal and civil cases. The justice sector agencies will maximize the use of available technologies for the speedy resolution of criminal and civil cases, and community and economic disputes. The use of ICT-

enabled systems will be expanded for investigation, prosecution, and adjudication, harmonization of procedures, and improving evidence management.

Initiatives to improve the criminal investigation system will be pursued. These include legislation being proposed by the Department of Justice (DOJ) to streamline the criminal investigation processes among prosecutors and law enforcers, as well as improvements in existing court rules and procedures on criminal investigation and better

coordination with the Supreme Court (SC). The Witness Protection Program will be strengthened and a whistleblower protection program will be established to facilitate case buildup, investigation, and prosecution, especially on heinous crimes and high-profile cases. International cooperation on criminal justice will also be pursued including mutual legal assistance and transfer of sentence.

Investigation and prosecution of cases involving illegal drugs, human trafficking, cybercrime, and grave human rights violations will remain a priority for the justice sector. As such, the government will establish and/or improve appropriate policies, interventions, coordination, and specialized procedures.

The ADR will be strengthened at all levels. Specifically, the *Katarungang Pambarangay* will be promoted as the primary mechanism of local governments for resolving community-level disputes. The Department of the Interior and Local Government (DILG) will expand its awards program, while the DOJ-Office for ADR will enhance and expand the scope of its mediation capacity building for the *Lupong Tagapamayapa* in coordination with the DILG. In addition to its regular functions on the provision of legal aid services, the Public Attorney's Office (PAO) will sustain its services on mediation and conciliation of disputes. The DOJ will also continue to build the prosecution-level mediation procedures as an ADR mechanism in the National Prosecution Service. Measures to further expand and mainstream the use of ADR in relation to criminal justice will be explored, specifically to include law enforcement agencies, indigenous and community-based justice systems, and restorative justice. Given the requirements for the post-COVID new normal, the government will promote the use of online dispute resolution mechanisms at all levels.

The SC will sustain the review and enhancement of judicial rules and procedures with the promulgation and effectivity of the amendments to the Revised Rules of Evidence (A.M. No. 19-08-15-SC) and to the Revised Rules on Civil Procedure (A.M. No. 19-10-20-SC), which took effect on May 1, 2020. Also

to be covered are the continuous trial system and ICT-enabled systems such as videoconferencing facilities and the e-Courts system. Initiatives on online filing of cases, petition of bails, and electronic testimony will also be institutionalized. The SC will enhance and expand the Family Courts Act of 1997 and pursue the drafting, finalization, and approval of its Implementing Rules and Regulations (IRR). A review of the design and implementation of the Justice on Wheels will also be pursued to make it more relevant and accessible to the people. Lastly, the coverage of small claims courts will be broadened by further promoting it to the public and expanding its coverage to more court users.

Ensure access to justice by the poor, vulnerable, and marginalized groups. To ensure access to justice, the government will prioritize strengthening of the justice sector agencies' capacity to deliver legal and victim assistance. To increase access of the poor, vulnerable, and marginalized sectors to legal aid, plantilla positions will be increased, and the recruitment of investigators, prosecutors, public attorneys, judges, and other legal or court officers will be expedited. Support will also be provided to all personnel nationwide.

Apart from the regular services of the PAO, other legal aid programs will also be sustained and improved such as the implementation of the Revised Law Student Practice Rule (Rule 138-A) of the SC and the DOJ Action Center Program. The justice sector agencies will also explore and implement legal internship and practice programs to augment the limited manpower for legal services and facilitate the recruitment of competent personnel.

Safe and convenient access to legal and victim assistance will be established through online and other communication platforms. Moreover, sustained physical access to free legal assistance and victim support services of agencies concerned will be ensured even during pandemics and other public emergency situations.

Assistance and support for victims of crimes and human rights violations, including gender-sensitive and child-friendly procedures and facilities, will

be improved and strengthened. These include increasing the compensation of victims of unjust imprisonment and victims of violent crimes through the amendment of RA 7309.¹ Referral procedures for legal assistance and victim support in relation to applicable frontline services will be integrated into the manuals of operations, Citizen's Charter, and public assistance or complaint desk mechanism of agencies concerned.

The Commission on Human Rights (CHR) will continue its efforts to facilitate access to justice particularly on addressing human rights violations, empowering the marginalized to seek response and remedies for injustice, and improving legal protection awareness and aid, among others. Its Legal Clinic Caravan will sustain its developmental and legal assistance and counselling. These include increasing human rights awareness, capacity building and training on basic human rights, and raising public awareness on the role, mandate, and services of CHR, and other relevant human rights laws.

Pursue jail decongestion and corrections reform.

Jail decongestion and corrections reform will be pursued in terms of program, institutional, and legal framework. This will be achieved by enforcing the right of persons deprived of liberty (PDLs) to bail in appropriate cases and their right to speedy trial.² Construction and repair of penal facilities will also be prioritized to improve living conditions of PDL and facilitate offender rehabilitation, welfare, and development. The use of teleconferencing or online hearings during court proceedings will be expanded for PDL and other similarly situated parties (e.g., complainants, witnesses, and victims who are constrained from physically appearing in court) to facilitate faster resolution of cases.

Alongside efforts to decongest penal facilities, the government will continue to intensify efforts to ensure drug-free penal facilities and will put in place necessary health and safety protocols to ensure humane living conditions of PDL. Regular

health monitoring will be provided to PDL, along with provision of basic needs and services.

Security facilities will be modernized to prevent escapes, violence, and illegal activities. Jail and prison management policies will be continuously reviewed, improved, and harmonized. These include procedures in terms of admission, classification, security, health, medical treatment, visitation, transfer, transportation, and release. Authorities will ensure that these standards are gender- and child-responsive for PDL and visitors. Appropriate interventions will be put in place for radicalized PDL and those charged or convicted of heinous crimes.

Access to legal assistance for pre-sentence and sentenced PDL will be provided and facilitated. The Bureau of Jail Management and Penology (BJMP) will continuously improve and update its paralegal program for PDL in local jails, which the Bureau of Corrections (BUCOR) can adopt for national penitentiaries. The *e-Dalaw* facility will be sustained and introduced in more jails and prisons to enable off-site interface of PDL and their families, subject to appropriate security protocols and available resources.

The Judiciary will sustain and expand its lead role in the Task Force *Katarungan at Kalayaan* as an inter-agency forum to address jail congestion and facilitate timely resolution of cases involving pre-sentence detainees. The pilot implementation of the Task Force has been rolled out in the court stations of Manila, Quezon City, Makati City, Pasay City, and Muntinlupa City. Innovative approaches on facilitating the conduct of trial for PDLs will also be explored and pursued, including transfer of venue in authorized cases for valid grounds and on-site trial.

The CHR will likewise continue its efforts in operationalizing the Interim National Preventive Mechanism (NPM) against torture pursuant to the State obligation under the United Nations (UN) Optional Protocol to the Convention against torture

¹ An Act Creating a Board of Claims under the DOJ for Victims of Unjust Imprisonment or Detention and Victims of Violent Crimes, and for Other Purposes, RA 7309, 1992.

² Supreme Court of the Philippines, Administrative Memorandum No. 12-11-2-SC on *Guidelines for Decongesting Holding Jails by Enforcing the Rights of Accused Persons to Bail and to Speedy Trial*, March 18, 2014.

and other cruel, inhuman, or degrading treatment or punishment. This aims to improve the human rights situations of PDL, the conditions of the detention facilities, and the prevention of torture cases.

In partnership with other organizations, the CHR will provide legal assistance to PDL and conduct regular case monitoring to facilitate early and timely release of qualified PDL.

The DOJ and the DILG will also coordinate with the Congress to revisit and improve the country's legal and policy framework relating to the penal system and restorative justice, taking into consideration the state obligations on the rights of PDL, offenders, and victims, public safety, and national security. This will include custody, reformation, and reintegration of PDL, as well as improving the institutional framework of penology and corrections.

With the revised IRR of RA 10592, also referred to as the Good Conduct Time Allowance (GCTA) Law, strict implementation will be ensured particularly on the exclusion of heinous crime offenders and inclusion of transparency and accountability mechanisms. Non-custodial measures will be maximized, including release on recognizance and community service for arrested and charged persons, and probation, parole, and executive clemency for convicted persons. Rules and guidelines relative to probation, parole, and executive clemency will be reviewed and improved in the interest of restorative justice for the offender and the victim.

Improving sector efficiency and accountability

Strengthen justice sector coordination. Coordination within the justice sector at the national and local levels will be strengthened through the Justice Sector Coordinating Council (JSCC) and its Justice Zones. The JSCC will establish additional sites subject to a thorough evaluation and calibration of implementing arrangements. This will include the governance mechanism, selection and

establishment criteria, monitoring and evaluation, and possible alignment with other regional and local structures.

Respective justice sector agencies will implement the Justice Sector Convergence Program, under the leadership of the JSCC within the agreed strategic framework. Initiatives will be anchored on individual agency mandates, programs, projects, functional competencies, and institutional independence.

The current COVID-19 pandemic presents a new dimension in coordinated justice sector approach. A business continuity plan will be drafted to ensure sustained administration of justice. This includes the formulation of a sector-wide national emergency preparedness and response framework. Coordination with and guidance from justice sector agencies during emergency situations will be facilitated relative to the legal framework, administration of justice, and protection of human rights.

The justice sector will sustain the implementation of the National Justice Information System, with the support of the Department of Information and Communications Technology (DICT) and in compliance with the requirements of the Data Privacy Act. The DOJ, as the lead agency, will update the Single Carpeta System to conform to the new IRR of the Expanded GCTA Law. The development of an information exchange platform will be pursued with the DICT towards streamlining inter-agency processes within the justice sector. The Philippine Crime Index will also be made available initially to justice sector agencies to harmonize crime and criminal justice data for legal research and as reference for policy development.

While the development of criminal justice information exchange is underway, the SC, Philippine National Police (PNP), BJMP, BUCOR, and Bureau of Immigration (BI) will proceed with the development and implementation of systems and procedures for electronic transmittal and documentation of warrants, hold departure orders, and commitment, mittimus, and/or release orders.

Moreover, the justice sector agencies will continue to participate in other established inter-agency mechanisms at the national, regional, and local levels, with respect to governance, economic, and social development, peace and order, public safety, and poverty alleviation.

Enhance sector efficiency. Justice sector agencies will continue to review and improve their systems and procedures in the context of the government's quality and performance management policies, and in compliance with RA 11032.³ Sustained administration of justice and delivery of services will be ensured amid public emergency situations.

Further, these agencies will work towards optimal access to and management of human, financial, and material resources. Efforts will be undertaken to improve the staffing structure and increase the number of investigators, prosecutors, public attorneys, judges, jail and prison personnel, parole and probation officers, support, and other personnel, especially at the regional and local levels.

Justice sector agencies will establish a sustained and ICT-enabled competency framework and development programs in accordance with civil service policies, especially for prosecution, law enforcement, court, legal service, frontline, management, and vital support personnel. Specialized trainings and other capacity building activities will be harmonized among justice sector agencies to align with their functional mandates and competencies. For lawyers, these will be harmonized with their mandatory continuing legal education.

Coordination within the sector and with infrastructure oversight and land management agencies will be improved specifically on planning, development, funding, project implementation, and maintenance of agency infrastructure.

Sector agencies will maximize the use of available ICT resources for the development and implementation of their respective application systems for core and frontline services, case

management, and administrative support processes, including monitoring and evaluation. The development and use of the system for electronic transmittal of warrants and court orders to agencies concerned is ongoing. The Enhanced e-Warrant System was launched by the SC and the PNP on September 8, 2020.

Increase transparency, accountability, and citizen engagement. Justice sector agencies will continue to participate in multi-sectoral mechanisms such as established committees, councils, and engagements with civil society organizations (CSOs), for purposes of planning and policy development. The agencies will work together through the JSCC in consolidating and harmonizing their available data for better public information. This includes the provision of timely public information, reports, and statistics for government and non-government stakeholders, such as cases and services relative to the COVID-19 pandemic and other emergencies.

Public information on the justice system, including access to legal remedies and assistance, will be continuously improved through agency websites and other media and communication platforms. Online judiciary information platforms (i.e., court locator, judicial application scheduler, and public assistance helpdesk) will be sustained and maximized, including the accessibility of court details, to ensure easier facilitation of online filing of complaint and grant of bails.

The National Economic and Development Authority (NEDA) and the Philippine Statistics Authority (PSA) will develop and implement governance measurement and crime victimization surveys, incorporating national and local surveys to engage the citizens in measuring the performance of the justice system.

³ The Ease of Doing Business and Efficient Government Service Delivery (EODB-EGSD) Act of 2018, RA 11032, 2018.

Legislative Agenda

For the rest of the Plan period, the following legislative agenda will be pursued:

Table 6.2 Legislative Agenda to Pursue Swift, Fair, and Humane Administration of Justice

LEGISLATIVE AGENDA	RATIONALE
<i>Criminal, civil, and economic justice processes ICT-enabled and streamlined</i>	
Streamlining the criminal investigation process, including the review of the standard of proof in determining probable cause	This initiative seeks to redefine the role of prosecutors in relation to case buildup by law enforcers and preliminary investigation in relation to the courts, and increase the threshold for filing criminal cases in court.
Amendment of the Expanded GCTA Act (RA 10592)	The proposed amendment aims to clarify the applicability to heinous crime offenders; include transparency procedures; establish checks and balances, including the role of higher and court authorities (i.e., apart from jail and prison authorities); and provide for corrective measures in cases of erroneous grant of GCTA and release on account thereof.
<i>Sector efficiency and accountability improved</i>	
Creation of New Courts	Under this initiative, the distribution of courts under the Judiciary Reorganization Act will be reviewed, in relation to the population per proposed court location, historical volume of filings, and the existing dockets of the courts in that particular location. Where necessary, the existing courts may be redistributed and new courts created as needed.
Strengthening of the Victims Compensation Program	Amending its enabling law, RA 7309 will help increase compensation for victims of unjust imprisonment or detention and victims of violent crimes as well as their access to the program, and improve its administration.
Establishment of the Commission on Human Rights Charter	This will help strengthen the CHR as a National Human Rights Institution (NHRI), compliant with the requirements of the UN Paris Principles affecting NHRIs worldwide. Among the requirements is ensuring NHRI's independence, including full fiscal autonomy.
Establishment of a Unified Penology and Corrections System	This action will address the fragmentation on the institutional framework of the penology and corrections system.
Strengthening the Witness Protection and Whistleblower Protection	This will encourage coverage for more witnesses as well as maintained coverage for them towards successful prosecution, especially of heinous and high-profile crimes. Likewise, the Whistleblower Protection Program will encourage and protect whistleblowers.

07 Promoting Philippine Culture and Values towards *Bayanihan*



Promoting Philippine Culture and Values towards *Bayanihan*

Culture is a dynamic and multidimensional aspect of development that spans across various sectors and social groups, shaped by their histories, knowledge, and traditions. Values, on the other hand, are the ideals shared by a group or a community regarding what is good or bad, desirable or undesirable, acceptable or unacceptable. The pandemic disrupted the collective way of life of Filipinos and the way they interact with one another. Physical distancing meant limited social gatherings and, for some, isolation from their communities. It may be too early to determine long-term effects of the pandemic to overall social capital. Yet, Filipinos never get tired of finding ways to inspire each other through creative works and creative solutions to respond to the crisis.

In building a high-trust society towards a healthy and resilient Philippines, the Philippine Development Plan (PDP) 2017-2022 acknowledges the role that culture and values play in development. Having a set of values that is shared within a society provides a common ground where greater cohesion can be cultivated. Under the *Malasakit* pillar, this chapter invokes the Filipino spirit of *bayanihan* to enable the whole-of-government and whole-of-society response and recovery from the pandemic by promoting cultural awareness and understanding, inculcating values for the common good through a National Values Formation Program, advancing creativity for social impact, and strengthening culture-sensitivity in governance and development. Hence, culture is the background while shared values are the guiding principles by which policies and programs will be developed to achieve inclusive, sustainable, and people-centered development.

Assessment and Challenges

Assessment: The government's greater awareness and recognition of the role of culture in the country's socioeconomic development prompted significant foundational efforts for the sector. However, the unprecedented impact of the pandemic exposed major policy gaps in the existing governance framework for cultural development and the appreciation for diverse cultural expressions. For one, creative and cultural workers and enterprises, which include the arts, entertainment, and recreation sector, along with allied sectors, such

as tourism and sports and fitness, were among the hardest hit due to the closure of businesses during the community quarantine period. These businesses have traditionally operated around crowds and will need to be reinvented to operate under the new normal.

Challenges: Incidences of discrimination and prevalent disinformation have been reported, due in part to lack of awareness of our diverse cultures. The Philippines has consistently shown generally weak

interpersonal trust even under the “old normal.” Major behavioral shifts, such as the implementation of physical distancing measures and increased citizen engagement online, are expected to further impact on social cohesion and level of societal trust. However, it may be too early to tell the long-term effects of the pandemic to overall social capital,

which also includes institutional trust and civic engagement, among other components.

In transitioning to the new normal, cultural and creative enterprises and workers, especially freelancers in the gig economy, remain vulnerable.

Targets

Recognizing the difficulties in measuring culture outcomes as proxied by the previous set of indicators, a new set of core indicators and corresponding targets have been identified as follows:

Table 7.1 Updated Plan Targets to Promote Philippine Culture and Values

INDICATOR	BASELINE VALUE (YEAR)	TARGETS			
		2020	2021	2022	END OF PLAN
Pride of being Filipino increased (%) ^a	92.2 (2013)	N/A	N/A	N/A	Increased
Legatum Prosperity Index (LPI) - Social Capital pillar score improved ^b	59.4 (2016)	60.5	61.5	62.5	62.5
LPI - Social Capital pillar percentile rank improved ^b	83 (2016)	Top 15%	Top 15%	Top 15%	Top 15%
World Intellectual Property Organization (WIPO) - Creative Outputs score improved ^c	22.1 (2016)	22.6	Increased	Increased	Increased
WIPO - Creative Outputs percentile rank improved ^c	25.0 (2016)	27.0	Increased	Increased	Increased
Number of Regional Development Plans (RDP) with culture components increased (cumulative)	0.0 (2016)	17.0	17.0	17.0	17.0
Percentage of local government units (LGU) with Local Culture and Arts Councils (LCAC) increased: Threshold = 1,715 (cumulative) ^d	22.5 (2018)	36.0	47.2	58.3	58.3
Percentage of LGUs with local cultural inventories submitted increased: Threshold = 1,715 (cumulative) ^e	3.7 (2018)	55.8	75.5	94.8	94.8
Percentage of LGUs with Indigenous Peoples Mandatory Representation (IPMR) increased (cumulative; Threshold of P/C/M = 1,406)	21.4 ^f (2015)	44.2	44.0	56.5	56.5

Notes: 2020 targets were set prior to onset of the COVID-19 pandemic and retained in the midterm update. The 2021, 2022, and end of plan targets were adjusted to take into consideration the effects of the COVID-19 pandemic.

^a This indicator is taken from the Philippine Statistics Authority’s (PSA) Functional Literacy, Education, and Mass Media Survey (FLEMMS), which is only conducted every five years. Results of 2019 FLEMMS will be used as baseline for next Plan period. Reporting on FLEMMS-generated indicators with no comparable 2013 figures will be deferred to the next Plan period. The next round of FLEMMS is expected to be conducted in 2024.

^b New indicator included during the midterm update as proxy for “tolerance and respect for others enhanced.” The Legatum Prosperity Index (LPI) is the identified source for the “Social capital index” adopted by the World Economic Forum’s (WEF) Global Competitiveness Index (GCI) 4.0 indicators. This pillar measures performance in terms of social cohesion and engagement (bridging social capital), community and family networks (bonding social capital), and political participation and institutional trust (linking social capital).

^c New indicator included during the midterm update as proxy for “level of awareness of cultural diversity increased.” This sub-index of the World Intellectual Property

Organization's (WIPO) Global Innovation Index (GII) represents the contribution of creativity to the overall innovation-based economy. This pillar measures performance in terms of: intangible assets, creative goods and services, and online creativity.

^d Replaced the indicator “number of arts organizations and arts councils established per region.” LCAC are mandated to draft an annual cultural development plan to be integrated in the local development plan.

^e Replaced the indicator “number of cultural conservation management plans developed across all levels of government”

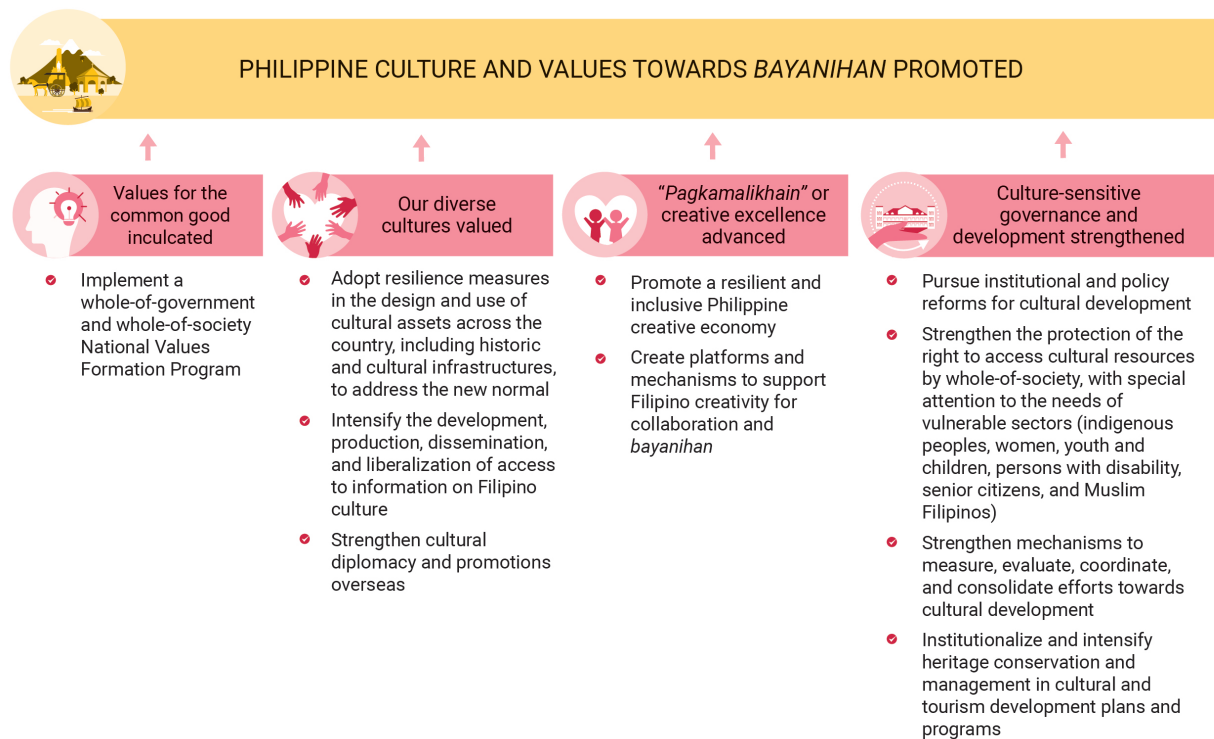
^f Revised baseline during the midterm update from 7.0 percent to 24.1 percent. The 2015 baseline of 7.0 percent (a total of 2,707 LGUs) was based on actual accomplishment upon approval of the Implementing Rules and Regulations (IRR) on IPMR in 2009 until 2015. Revisions to the IPMR Implementing Guidelines were finalized in 2018.

Strategic Framework

Establishing high trust among peoples and in institutions and focusing on the common good are key aspects in our pursuit of a socially-cohesive society that will be vital in building a healthy and resilient Philippines. Recognizing the basic mission of culture and heritage to strengthen values and identity and enhance the quality of life, the revised strategic framework highlights the promotion of Philippine culture and values towards the

Filipino spirit of *bayanihan* to enable a whole-of-government and whole-of-society response and recovery. This will be done by raising awareness and understanding of our diverse cultures, implementing a National Values Formation Program based on our shared values, nurturing Filipino creativity for social impact, and mainstreaming culture-sensitivity in governance and development.

Figure 7.1 Strategic Framework to Promote Philippine Culture and Values towards Bayanihan



Strategies

Inculcating values for the common good

A clearer understanding of our core values can inform the appropriate interventions to influence people's attitudes and behavior towards cultivating a sense of shared responsibility and building a high-trust society.

Government will utilize the findings from the two recently completed studies on Filipino values¹ and the *We Recover as One* report for this purpose.

Implement a whole-of-government and whole-of-society National Values Formation Program. Ongoing values formation programs formulated and implemented by different government agencies will be streamlined under a National Values Formation Program that will focus on the core values which are shared by Filipinos and which contribute to the achievement of the country's development goals. Based on the National Commission for Culture and the Arts (NCCA) *Study on Filipino Values*, these include valuing family, education, faith, health and wellness, basic needs, self, work and livelihood, peace and development, honesty and integrity, resilience, life and purpose, human rights, environment, love for country, happiness, *kapwa*, governance, culture, arts and sciences, and creative excellence.

Concerted action on values formation by all levels of government, in partnership with various sectors, such as mainstream media, the LGUs, and civil society organizations (CSOs), will ensure greater societal impact.

Under this program, the Civil Service Commission (CSC) through its Civil Service Institute, will work toward ensuring that public officials and civil servants not only embody Filipino core values, but

exemplify the highest standards of patriotism, integrity, excellence, and spirituality to increase public trust in institutions (*see Chapter 5*).

Values of *malasakit*, *bayanihan*, resilience and *pakikipagkapwa* will likewise be emphasized through the use of various channels for values inculcation all throughout the country, such as formal and informal education systems, information campaigns, and values orientation seminars, among others. Volunteerism across various aspects of community life will be vigorously promoted and pursued, in collaboration with LGUs. This includes advocating the principles and practices of volunteering within the family, community, workplace, and greater society.

Finally, as much as values start within the family, values inculcation initiatives will be reinforced through education beginning at children's formative years. Values such as cooperation, discipline, and a sense of shared responsibility as citizens are also better practiced in constant dealings with others outside the family. Hence, under this program, culture and values will be mainstreamed in the curriculum within the basic, technical-vocational, and higher education systems.

Valuing our diverse cultures

Adopt resilience measures in the design and use of cultural assets across the country, including historic and cultural infrastructures, to address the new normal. Although strict physical distancing measures will limit the use of existing public cultural structures (i.e., museums, libraries, and performance venues), they can still be reconfigured for other purposes such as for heritage preservation and conservation or as workspaces for cultural workers who may not fully

¹ The study commissioned by the NCCA titled "NCCA Study on Filipino Values," identified a set of values shared by Filipinos which contribute to the attainment of *AmBisyon Natin 2040*, while the study commissioned by the NEDA titled "A Study on the Dimensions of Philippine Culture," measures aspects of culture that influence the achievement of national development goals.

transition to digital processes. Spaces that will not immediately reopen to the public may be redesigned for such purposes, notwithstanding digitization efforts in these institutions.

To ensure safe reopening of cultural spaces and eventual resumption of cultural and creative activities, cultural agencies will coordinate with the Department of Health (DOH), the Department of Labor and Employment (DOLE), and the Department of Trade and Industry (DTI), in crafting health and sanitation guidelines. These include safety protocols for production shoots, cinema and exhibition venues, museums, and libraries, among others, to minimize the risk of transmission of COVID-19.

The redesign or establishment of cultural structures, especially open-space cultural parks or hubs in the regions, will be supported. This will be done in collaboration with concerned agencies, such as the NCCA, the Film Development Council of the Philippines (FDCP), the National Library of the Philippines (NLP), and the Philippine Sports Commission (PSC) to ensure compliance with industry standards for such facilities and ensure the health and safety of the general public. The establishment of culture hubs in Bohol and Davao Region, and the establishment of open-space cultural parks and hubs in other parts of the country will be pursued in collaboration with LGUs.

Intensify the development, production, dissemination, and liberalization of access to information on Filipino culture. Relevant agencies will develop resource materials more extensively to ensure greater public access to knowledge on culture and history. This is to curb the lack of understanding of the diverse Philippine cultures which lead to misrepresentation, bias, and discrimination, especially of indigenous peoples (IP) and Muslim Filipinos. Technology will be used to ensure effective knowledge dissemination and wider reach. To this end, the development of the Culture Portal under the National Government Portal Project will be hastened.

Documentation and research on both tangible and intangible heritage will be improved through interagency research initiatives. Mechanisms to

consolidate research works by relevant government agencies and independent organizations will be established to ensure that all documentations is captured and used as bases for government interventions. The involvement of the academe and other research institutions in partnering with indigenous cultural communities (ICCs) and IPs as primary participants in indigenous knowledge systems and practices (IKSPs) documentation initiatives will also be encouraged. This is while ensuring that researchers are properly briefed on the free, prior, and informed consent (FPIC) process and communal intellectual property rights. On the other hand, the National Commission on Indigenous Peoples (NCIP) will continuously review and enhance the guidelines on research and documentation of IKSPs, as well as the FPIC process to balance the protection of IPs while implementing projects. At the same time, NCIP will continue to work with agencies and other partner-stakeholders to facilitate and implement necessary reforms to safeguard cultural expressions and uphold the cultural integrity of ICCs/IPs.

Strengthen cultural diplomacy and promotions overseas. Cultural cooperation agreements will be continuously forged to foster greater appreciation of Philippine culture and Filipino talents overseas. Efforts to promote Philippine culture and history, especially among overseas Filipinos (OFs), will be strengthened. Trainings on cultural diplomacy for foreign service officers and foreign service staff handling culture diplomacy activities will also be intensified in collaboration with the Department of Foreign Affairs (DFA), the DTI, the Department of Tourism (DOT), and culture agencies.

OFs will be encouraged and tapped to serve as cultural ambassadors in destination countries. Given the limitations brought by physical distancing measures, the government will carry out cultural diplomacy and promotions overseas through digital means as a way for OFs to maintain their connection to their culture (*also in Chapter 21*). In cases where racism and discrimination against migrant communities escalate abroad, cultural diplomacy programs will become vehicles in raising awareness and understanding of Philippine culture and cultural diversity among non-Filipinos.

Advancing *pagkamalikhain* or creative excellence

Promote a resilient and inclusive Philippine creative economy. The creative economy roadmap will be completed to serve as a policy framework to strengthen resilience of cultural and creative industries and address specific concerns of creative and cultural workers, especially freelancers in the gig economy. The roadmap will consider the challenges posed by the Fourth Industrial Revolution (FIRe) and the transition to a digital economy (*see Chapter 9*), as well as the current labor situation among creatives. To ensure a whole-of-country approach to develop and promote the creative industries, the establishment of appropriate coordinating mechanisms across different agencies and stakeholders will be supported.

To strengthen cultural and creative enterprises and workers' resiliency against disruptions, capacity building interventions will be supported. For creative enterprises, programs such as business continuity planning, digitizing operations, knowledge transfer, and information sharing will be implemented. For creative workers especially freelancers, skills retooling and upskilling programs along with continuing income support programs, such as the NCCA Assistance Program and the FDCP Disaster/Emergency Assistance and Relief, will be made available.

Proper interventions to integrate creatives into the formal economy and ensure their welfare will also be pursued. This includes coordination with relevant agencies, such as the DOLE, the DTI, the Social Security System (SSS), and the Bureau of Internal Revenue (BIR), to facilitate the registration of creatives and freelancers, and provide the creative sector greater potential for economic advancement and better social protection.

The Philippines' accession to the United Nation's (UN) Educational, Scientific, and Cultural

Organisation (UNESCO) 2005 Convention on the protection and promotion of the diversity of cultural expressions will be hastened. Being a party to the convention will provide the country's creative industries, artists, and culture workers with opportunities to further build their capabilities and capacities for creative production and distribution across the world. Philippine cities, which aim to become part of the UNESCO Creative Cities Network, will also be actively and adequately supported. Industry linkages with international stakeholders will likewise be promoted as a venue for the Philippine creative economy to be apprised of global trends and to optimize opportunities for marketing and distribution of creative content, products, and services.

A national branding strategy will also be adopted as a unified framework to promote the Philippines and the Filipino identity to the rest of the world. Different government agencies and the private sector will work toward the convergence of various branding and promotion campaigns of the government for investments and trade, tourism, education and sports, culture, and diplomacy, among others. The brand will articulate our collective aspirations as a nation and serve as a consistent marketing strategy for Philippine goods and services (*see Chapter 15*).

Creativity will be cultivated as a vital skill and integrated in other disciplines to equip an agile workforce (*see Chapter 10*). Along this line, the transformation of the Department of Education's (DepEd) Science, Technology, Engineering, and Mathematics (STEM) program to Science, Technology, Engineering, Arts, and Mathematics (STEAM) is a welcome development. Secondary level schools that offer special program for the arts will also be equipped with facilities and well-trained teachers while establishing regional arts academies. At the tertiary level, young people will be encouraged to take specialized programs on cultural education and arts to become future culture and arts managers. Graduates of culture-

related qualifications² under the Technical Education and Skills Development Authority (TESDA) will also be connected to industries and markets to promote creative excellence and for them to enjoy income security.

Create platforms and mechanisms to support Filipino creativity for collaboration and *bayanihan*. Creativity for social impact is a growing trend within the industry and will be encouraged further. As the country lays down plans and policies that will formally and strategically ensure the economic and social benefits of supporting the creative sector, programming will focus on ensuring that digital and online platforms are maximized to provide Filipino creatives due exposure through events, fairs, exhibits, shows, and competitions. A showcase of the works of Filipino creatives elicits national pride and increases awareness and appreciation of the country's diverse cultures. As part of the online and digital shift, mechanisms to address cybersecurity concerns, such as copyright infringement, especially on film and audiovisual content, will be established.

Artistic-scientific-technological collaborations will be strengthened to stimulate innovations for the common good (*see Chapter 14*). Examples of such programs are the DTI-Design Center of the Philippines' (DCP) Good Design Philippines and the DepEd's National Festival of Talents. Collaboration and partnerships with the academe and private sector, including startups and creative hubs, will be nurtured to facilitate the sharing of best practices in technological adaption and other innovations within the sector. Where possible, these linkages can also serve as a venue for Filipino creatives to promote and distribute their works and establish networks with other groups.

Strengthening culture-sensitive governance and development

Pursue institutional and policy reforms for cultural development. Existing governance structures and mechanisms for culture and the arts need to be strengthened. Thus, organizational structures within and institutional arrangements among culture agencies will be reinforced and challenges in coordination, especially on policy and program implementation, will be addressed. These are likewise seen to greatly improve government's ability to protect, preserve, and promote our cultural and natural heritage in line with the country's overall development goals.

With the inclusion of culture and arts in the Seal of Good Local Governance (SGLG), the LGUs are expected to be more proactive in heritage management by incorporating heritage preservation, protection, and promotion efforts into their local development plans. Land use plans should also integrate protection and preservation of heritage. Capacity building programs and activities to ensure the full functionality of LCAC will also be institutionalized through collaborative work among the NCCA, the LGUs, and the regional development councils (RDC). These include developing capabilities for heritage documentation, cultural mapping, planning, policy-making, and development. The LGUs are especially encouraged to utilize a portion of their internal revenue allotment (IRA) based on the Department of Budget and Management's (DBM) Local Budget Memorandum No. 78, s. 2019 for local heritage management efforts. In implementing all these, the NCCA and the Department of the Interior and Local Government (DILG) will be vigilant in the monitoring of the LGU compliance with the National Cultural Heritage Act (Republic Act [RA] 10066).

² TESDA, in collaboration with the NCCA, has developed culture-related NC II qualifications in nine areas: (1) handloom weaving (upright loom); (2) handloom weaving (backstrap loom); (3) beadworks and accessories making; (4) mat weaving and diversified product making; (5) basket weaving; (6) embroidery; (7) wood carving; (8) paper mache making; and (9) pottery.

The engagement of ICCs especially in the formulation of policies and measures that concern their ancestral domains, will be upheld so that IKSPs are respected and valued in terms of ensuring environmental sustainability since cultural heritage is inextricably linked to biodiversity heritage. This is especially important for disaster risk reduction and building resilience in communities. The effective implementation of the IPs Rights Act (RA 8371) especially on the mandatory representation of IPs in local legislative councils and policy-making bodies, will be ensured through the full implementation of the new IPMR Guidelines.

Strengthen the protection of the right to access cultural resources by whole-of-society, with special attention to the needs of vulnerable sectors (IPs, women, youth and children, persons with disability [PWD], senior citizens, and Muslim Filipinos). All Filipinos, regardless of age, gender preference, or socioeconomic situation, must have access to cultural resources that enrich their minds, develop their talents, build their identities, and promote the core Filipino values. Online and digital culture, arts, and heritage programs will be designed to inspire *bayanihan* and support lifelong learning, creative collaboration, mental health and well-being, and cultural and heritage tourism, among others.

Existing Knowledge Development Centers (KDC), Institutes and Schools of Living Traditions (ILT/SLT), *Sentro Rizal*, arts centers, museums, and cultural centers will improve on digital and online programs to continue their respective work of transmitting knowledge and skills and cultural dissemination. KDCs may already be integrated within the system of libraries and wherever information technology (IT) resources are accessible at the local levels, KDC online will be pursued. Necessary modifications on the design of ILT/SLTs will be made in line with physical distancing protocols to ensure the health and safety of culture bearers and the general public.

Programs designed specifically for the needs of vulnerable sectors will be enhanced in line with

the principle of respect for cultural diversity and cultural rights, notwithstanding community quarantine protocols that limit social gatherings. Particular attention will be given to groups with diminished mobility under stricter quarantine rules and those who have limited or no access to the internet.

The Community-based Skills Development Program for IPs and ICCs under the TESDA and the NCCA will be supported under a blended learning modality, as it enhances existing SLTs by developing trainers from different regions. Access to cultural resources for Muslim Filipinos will be improved, so they can participate in cultural life without fear of prejudice. Cultural infrastructure and resource materials will be made accessible to PWDs through technology and innovative design. Programs that are responsive to this strategy, such as the PSC's children's games, differently-abled sports for Life, IPs' games, and women in sports, will have to be repackaged in light of community quarantine guidelines.

Strengthen mechanisms to measure, evaluate, coordinate, and consolidate efforts towards cultural development. The Philippine Cultural Statistics Framework (PCSF) will be implemented as this generates the needed cultural statistics and indicators for evidence-based planning, policy-making, and programming. All agencies and CSOs that are directly engaged in any of the PCSF dimensions will be mobilized toward this end. Given the vulnerability of IP culture, the conduct of ethnographies of Philippine IPs will be a priority. Similarly, statistics on Muslim Filipinos will be developed. Cultural and creative industry mapping will be intensified by the DTI and the NCCA to better inform planning and programming for the sector through adequate funding and LGU-level trainings.

Registries for the sector have become even more necessary in order to account for individuals and firms affected by crises and for government to provide them appropriate support. To supplement the development of a registry of vulnerable persons, agencies such as the NCIP, the National Commission on Muslim Filipinos (NCMF), the

NCCA, the DTI-DCP, and the FDCP, will improve the generation of registries for IPs, Muslim Filipinos, creative and cultural workers, and freelancers, and coordinate the same with other social protection programs of the government (*see Chapter 11*).

Institutionalize and intensify heritage conservation and management in cultural and tourism development plans and programs.

Heritage serves as the holder of our collective memories and identity as a nation, and a reminder of our shared stories and experiences of resilience. As the country transitions into the new normal, heritage conservation will be institutionalized through cultural and tourism development plans. Responsible entities mandated to preserve heritage structures and owners of cultural properties will then ensure the development of conservation management plans and stronger implementation of related policies in preserving heritage structures. Plans and programs on the development of heritage preservation and conservation experts will be initiated.

Legislative Agenda

In the two remaining years of Plan implementation, the Planning Committee on Culture will exert its efforts toward the enactment of the following key legislations:

Table 7.2 Legislative Agenda to Promote Philippine Culture and Values towards Bayanihan

LEGISLATIVE AGENDA	RATIONALE
Strengthening the NCCA	<p>This will amend RA 7356 to strengthen and enable the NCCA to lead the protection, preservation, and promotion of our cultural and natural heritage and the creative arts for inclusive development.</p> <p>The amendments will pertain mainly to (a) establishing subnational offices that can promote, develop, and implement culture-related plans and programs at the local level and (b) reinforcing the NCCA's coordinative functions so that it can more effectively shepherd and direct activities towards the achievement of culture outcomes, including the development of cultural and creative industries.</p>
UNESCO Convention on the Protection and Promotion of the Diversity of Cultural Expressions	<p>Ratifying this Convention will further promote and protect the works of the creatives in the country as the Convention focuses on the protection of the diversity of cultural expressions all over the world. It highlights the creative industries, which have become important drivers in the cultural and economic development of nations.</p>
Modernization Act for the NLP	<p>Establishing the charter of the NLP will standardize public libraries across the country and ensure adequate funding to improve access to information and strengthen digital services, thereby promoting full intellectual and cultural development of the Filipino people.</p>
Film Industry Development Act	<p>The proposed legislation seeks to encourage the production of quality films, strengthen competitiveness of Filipino content and creative outputs in a digital landscape, address concerns on the welfare and capacity building for local film and audiovisual artists, technicians, and workers, and enhance film preservation and archiving.</p>
<i>Komisyon sa Wikang Filipino</i> (Commission on the Filipino Language) Act	<p>The proposed amendments to certain provisions of the Commission on the Filipino Language Act (RA 7104) will help strengthen the protection and conservation of intangible heritage (i.e., languages in the Philippines) and will also serve as the enabling law that will operationalize Article XVI, Sections 6 and 7 or the language provisions of the 1987 Constitution, following the recent Supreme Court ruling that such provisions are not self-executory.</p>

PART III

**TRANSFORMING
TOWARDS EQUITY
AND RESILIENCY
(“*PAGBABAGO*”)**

08

Expanding Economic Opportunities in Agriculture, Forestry, and Fisheries and Ensuring Food Security



Expanding Economic Opportunities in Agriculture, Forestry, and Fisheries and Ensuring Food Security

While the agricultural sector's growth has remained weak over the last three years, major policy reforms have created opportunities to pursue diversification and overall rural development. There has also been an improvement in the delivery of support services focusing on small farmers and fisherfolk (SFF). In particular, the Rice Tariffication Law (RTL) (Republic Act [RA] 11203), which amended the two-decade-old Agricultural Tariffication Act of 1996 (RA 8178) and replaces the quantitative restriction on rice imports with tariff, is considered the most important reform in the agriculture sector. The Law will benefit the entire economy, particularly the Filipino consumers, farmers, taxpayers and workers, and, most importantly, the poor. Rice farmers also benefit from the Law, given the PHP60 billion guaranteed Rice Competitiveness Enhancement Fund (RCEF), which aims to increase productivity of the rice sector. RTL will also benefit: (a) taxpayers, as there is no need to subsidize the operations of the National Food Authority (NFA), which has long been burdened with debt; (b) workers as it keeps inflationary pressures low and therefore limits the erosion of real wage; (c) children, as more affordable rice keeps them healthy and not hungry; and (d) the poor, with the availability of cheaper rice given their limited budget. The low rice prices and lower inflation help the country achieve its poverty reduction goals.

The country's experience with the COVID-19 pandemic and community quarantines (CQs) has put greater emphasis on food security in the new normal. Thus, to contribute to the goal of achieving a healthy and resilient Philippines, the Agriculture, Forestry and Fisheries (AFF) sector shall focus on ensuring availability, accessibility, and affordability of nutritious food while continuously addressing persistent challenges faced by the sector, particularly the constraints to access to land and water resources, vulnerability to climate change and disaster risks, limited strategic infrastructure, and long-standing institutional problems related to weak extension services, over-centralization, and lack of coordination and overlapping functions within and among agencies.

Assessment and Challenges

Assessment: The improvement in the delivery of support services prioritizing small farmers and fisherfolk, complemented by major policy reforms (e.g., RTL, *Sagip Saka* Act, and Personal Property Security Act) created opportunities to pursue diversification and overall rural development in the long run. However, the performance of the AFF sector, in the last three years, has been weak due to climate/weather disturbances (e.g., El Niño, typhoons), pest and animal diseases, weak global demand and increased competition resulting in the decrease in value of top exports (e.g., coconut), and weak coordination and convergence efforts among government agencies and stakeholders. The emergence of the COVID-19 pandemic and subsequent implementation of community quarantines also affected the sector with the disruption of agricultural activities owing to stringent measures implemented by the local government units (LGUs) on the movement of agri-food products. As a result, agri-food supply chains were affected and many farmers were unable to sell their produce. The movement of people involved in the transportation of inputs and products, technicians, extension workers, and even agricultural workers was also affected. Despite the disruptions in various agricultural activities and losses encountered during CQ, the AFF sector remains upbeat as farmers and fisherfolk still intend to continue their respective agricultural activities. Consumers, on the other hand, had difficulty accessing healthy and nutritious food during the CQs. In particular, vulnerable groups who rely on relief packs during the ECQ are limited to rice, canned goods, instant noodles, powdered milk,

and instant coffee. Nutritionally vulnerable groups such as severely wasted and stunted schoolchildren who rely on school- and community-based feeding programs for healthy and nutritious food were also affected due to the discontinuance of these programs with the closure of schools and daycare centers during the quarantine period.

Challenges: The pandemic has caused a shift in consumers' preference towards safe and nutritious food. As the sector moves to the new normal, the following are still expected to persist: (a) sporadic disruption in the agri-food supply chain, particularly in the transport and logistics of inputs, machinery and equipment, and farm produce; (b) limited movement of people involved in the transport of inputs and products, technicians, and extension workers; (c) strict regulation of the operations of wet markets, supermarkets, and retail food establishments; (d) increased demand for innovative technologies for processing and packaging to keep up with the demand for processed food products with longer shelf-life; and (e) reduced demand from institutional buyers for agricultural food items due to the decline in tourism and dine-in services. These emerging challenges, on top of existing issues such as constraints to access to land and water resources, vulnerability to climate change and disaster risks, limited strategic infrastructure, and long-standing institutional problems related to weak extension services, over-centralization, and lack of coordination and overlapping functions within and among agencies will put further pressure on the AFF sector.

Targets

The updated Plan aims to increase and maintain the AFF gross value added (GVA) within 2.5 percent to 3.5 percent from the baseline of -1.2 percent in 2016. Likewise, a reversal of the negative growth for the value of production in fisheries, A&F exports, and

labor productivity is targeted for the remaining plan period. Table 8.1 presents the targets corresponding to the sector outcome indicators under this chapter. Targets for outcome indicators on food security may be found in Chapter 11.

Table 8.1 Updated Plan Targets to Expand Economic Opportunities in Agriculture, Forestry, and Fisheries and Ensure Food Security

OUTCOME/INDICATOR	BASELINE VALUE (2016)	TARGETS			
		2020 ^{a/}	2021	2022	END OF PLAN
Sector Outcome 1: Sustainable and Resilient Production and Food Availability Ensured					
Growth of GVA in AFF increased (year-on-year at constant prices, in percent)	(1.2)	2.5-3.5	2.5-3.5	2.5-3.5	2.5-3.5
a. Crops	(3.2)	2.0-3.0	2.0-3.0	2.0-3.0	2.0-3.0
b. Livestock	4.6	3.0-4.0	2.0-3.0	3.0-4.0	3.0-4.0
c. Poultry	1.3	3.0-4.0	2.0-3.0	3.0-4.0	3.0-4.0
d. Forestry	(7.6)	2.0-3.0	2.0-3.0	2.0-3.0	2.0-3.0
Growth in value of production of fisheries increased (year-on-year at constant prices, in percent)					
a. Commercial	(7.8)	2.5	1.0	1.0	1.0
b. Municipal	(4.9)	1.0	3.0	3.0	3.0
c. Aquaculture	0.5	5.0	5.0	5.0	5.0
Growth in labor productivity of farmers and fisherfolk increased (year-on-year at constant prices, in percent)	(2.2)	4.7-6.2	5.2-6.4	5.4-6.6	4.9-6.0
Sector Outcome 2: Access to Markets of Small Farmers and Fisherfolk Increased					
Growth in the value of A&F exports Increased (year-on-year, FOB value, in percent)	(0.1)	9.0	9.0	9.0	9.0
Sector Outcome 3: Access of Consumers to Nutritious, Affordable, and Safe Food Improved					
Prevalence of moderate or severe food insecurity in the population based on the food insecurity experience scale (see Chapter 11 RM)					
a. Severely Food Insecure	5.1 (2019)	N/A	N/A	0.0	0.0
b. Moderately Food Insecure	39.1 (2019)	N/A	N/A	25.8	25.8

Source of baseline data: Philippine Statistics Authority (PSA)

^{a/} The original 2020 targets, approved in 2016 prior to the pandemic, were retained.

Strategic Framework

In the remaining Plan implementation period, the AFF sector will adopt a holistic value chain approach, guided by science-based decision support tools, towards ensuring sustainable and resilient

production and food availability, expanding access to markets by SFFs, and improving access of consumers to nutritious, affordable, and safe food.

Figure 8.1 Updated Strategic Framework to Expand Economic Opportunities in Agriculture, Forestry, and Fisheries and Ensure Food Security



Strategies

To achieve the Plan's targets, the following outcome-specific and crosscutting strategies will be implemented (see Figure 8.1). Some of the strategies in this chapter are cross-referred to other chapters.

Ensuring sustainable and resilient production and food availability

Improving AFF productivity within ecological limit

Optimize the use of science-based decision support tools and methodologies to improve resilience and productivity within ecological limit, and increase the income of farmers and fisherfolk. The existing National Color-Coded Agricultural Guide (NCCAG)¹ Map will be cascaded to the LGUs to assist farmers and other stakeholders in identifying areas where crops could ideally be grown based on soil type, climatic conditions, and bio-physical requirements. Promotion of existing crop management decision support tools, such as the Rice Crop Manager (RCM)² and other farm management tools (e.g. AgriDoc App, MOET App, etc.),³ will also be intensified to provide timely, location-specific crop and nutrient management recommendations to more farmers to improve their yield and increase farm income. To increase the

adoption of these science-based decision support tools, different extension delivery modalities will be used depending on AFF stakeholders' capacity and access to information and communication technology (ICT). These will include the use of blended learning platforms, such as web-based courses and applications, provision of offline versions of these applications, particularly for those with limited access to the internet, face-to-face training in areas where it is applicable, and the use of traditional media (e.g., radio, TV, print, etc.).

Pursue an ecosystems approach to fisheries management, including operationalizing fisheries management areas (FMAs)⁴ to provide for a science-based, participatory and transparent governance framework, and mechanism to sustainably manage fisheries. With the issuance of Fisheries Administrative Order (FAO) 263, policies in managing fisheries will be based on the status and capacity of the stocks within the FMAs, taking into consideration its impact on the economic well-being of fisherfolks. To support this, the Bureau of Fisheries and Aquatic Resources (BFAR) will intensify its efforts in establishing and convening the multisectoral Management Bodies (MB)⁵ in the FMAs, and develop the Ecosystem-Approach to Fisheries Management Plan (EAMP) guided by the result of the National Stock Assessment Program of the National Fisheries Research and Development Institute (NFRDI). A Scientific Advisory Group (SAG) composed of scientists, researchers, and technical representatives will also be established to

¹ Launched in March 2017. Thematic maps used were obtained from BSWM for the soils map, WorldClim and DOST-PAGASA for climate data, DENR-MGB for geo-hazard maps, and PSA and NAMRIA for political boundaries. The NCCAG includes data on crop suitability, agro-ecological zone, ground water availability, rainfall, temperature, poverty incidence, and farmers' demographics, among others.

² Based on research trials, RCM can increase yields and added net benefit when farm lots normally yield below 7 tons/ha at 14% moisture. For farm lots with normal yield of 7 tons/ha and above at 14% moisture, benefit from RCM could be very small or negligible.

³ The AgriDoc App developed by PhilRice is a farm management tool which can keep records on expenses and farm activities. It also allows farmers to view their farm area through Google Maps. The Minus-One Element Technique application (MOET App) is an Android-based app developed to complement the soil diagnostic tool MOET kit. It computes for fertilizer recommendations and yield estimates based on the pot-based fertilizer trial to identify significant nutrient elements lacking in the soil.

⁴ Based on FAO 263, FMA is a bay, gulf, lake, or any other fishery area which may be delineated for fishery resource management purposes. It provides that for purposes of sustainable fisheries management, 12 FMAs in Philippine waters are established, based on considerations of stocks boundary/range/ distribution, structure of fisheries, as well as administrative divisions, and undertaken through consultation based on stocks and fisheries distribution. (BFAR, FAO 263, s. 2019, *Establishment of Fisheries Management Areas for the Conservation and Management of Fisheries in Philippines Waters*)

⁵ MB in FMAs is composed of representatives from multi-sectors of fisheries such as LGUs, municipal and commercial fisheries, aquaculture, processors and traders, academe, NGOs, indigenous peoples, and other relevant NGAs.

provide policy support and technical advice to the MBs (see Chapter 20).

Strengthen the promotion of intercropping and integrated farming systems. Promotion of intercropping (e.g., corn or pineapple under coconut, etc.) and integrated farming systems, such as livestock-crops (e.g., integrated rice-duck farming system⁶, crops-livestock-fish (e.g., *Palayamanan*),⁷ and agro-forestry will be strengthened to maximize the use of land, improve resiliency, and enhance sustainability. SFFs shall be provided with capacity-building and retooling on appropriate cropping systems and technologies (e.g., suitable crops or combination of crops/livestock/fish, and management techniques, etc.) to help them not only in increasing their productivity and income but also contribute to the sustainable and efficient use of natural resources, and increase resilience. With intercropping or integrated farming, there will be increased diversity which can result in lower risk of pest and disease problems (i.e., better management of pest outbreak), increase insect and soil microbial diversity, and higher probability that at least one species or crop can withstand the weather disturbances. Likewise, viable technologies on sustainable land management, such as soil health management through balanced fertilization to improve soil quality and land productivity will be made accessible to SFFs.

Intensify the promotion of urban agriculture, backyard/household gardening of edibles and backyard animal raising, and community gardening. Given the importance of ensuring a steady supply of food, urban households and communities will be encouraged to produce fresh and healthy food from their backyards and spaces. The DA, in partnership with other government agencies, the LGUs, and the private sector, shall intensify the promotion of urban agriculture, subsistence backyard/household gardening

and animal raising, and community gardening through the establishment of community gardens in barangays and schools with vacant areas. The community/backyard gardens may serve not only as a source of nutritious food and livelihood but also as additional income for those who will sell their surplus. Production inputs such as seeds/seedlings, soil, compost, and initial stock (e.g., small ruminants, chicken, ducks, etc.) will be provided as start-up kits, complemented with skills training on sowing of seeds and proper management, composting, and pest disease management, among others. Registration processes and reporting requirements will need to be streamlined for more efficient assistance to investors/firms pursuing urban agriculture, particularly modern methods of growing plants and fish, such as hydroponics, aeroponics, and aquaponics (see Chapter 11).

Effectively implement RCEF in a timely manner to assist rice farmers during the transition period given the removal of the quantitative import restrictions (QRs) on rice. The RTL aims to make rice accessible and affordable to all Filipinos, particularly the poor who spend about 29 percent of their total food expenditure on rice. It also established a Rice Competitiveness Enhancement Fund (RCEF), with an annual allocation of PHP10 billion for six years, to enhance the productivity and competitiveness of rice farmers by providing them: (a) farm machinery and equipment; (b) high-yielding seeds; (c) low-interest credit; and (d) skills training programs on farm mechanization and modern farming techniques. The tariff collection, in excess of PHP10 billion, will still be provided to rice farmers for (a) cash transfer program; (b) titling of rice lands; (c) crop insurance; and (d) crop diversification. For the cash transfer program, it will be a short-term measure of the government while the rice industry is in transition and will prioritize farmers most affected by the drop in farmgate prices.

⁶ The integrated rice-duck farming system grows rice and ducks together in an irrigated paddy. The paddling movement of the ducks stimulates plant growth, while duck manure naturally fertilizes the soil. The ducks also eat the harmful insects and weeds, thus eliminating the need for pesticides and herbicides.

⁷ Palayamanan is a model of diversified integrated rice-based farming system developed and established by PhilRice composed of synergistically-compatible farming ventures such as rice, onion, poultry, livestock, and aquaculture. Under this system, the livestock transform plant residues and by-products into edible high-quality protein and manure, which is then applied to crops as organic fertilizer to increase crop productivity.

Intensifying development and adoption of modern, climate- and disaster-resilient production technologies

Accelerate irrigation development, especially the construction of disaster- and climate-resilient small-scale irrigation systems and retrofitting of existing ones, to be guided by a National Irrigation Master Plan (NIMP). This includes the financing of the modernization of priority irrigation systems, quick response for restoration works in disaster-prone areas, and regular preventive operations and maintenance for optimal production for the year-round cropping (*see Chapter 19*). In addition, to support sustainable consumption and production (SCP) initiatives, proper use of water-saving and water-harvesting technologies such as alternate wetting and drying (AWD), rotational method, rainwater harvesting, and solar-powered irrigation⁸ will also be promoted in areas where it is applicable. The protection, rehabilitation, and management of critical watersheds for irrigation are critical counterpart interventions to ensure sustainable water supply (*see Chapter 20*).

Intensify research and development (R&D) activities for AFF, including the development and commercialization of appropriate technologies to improve productivity, reduce post-harvest losses, and enhance risk resilience. Implementation of activities supporting the development and commercialization of climate- and disaster-resilient technologies, such as high-yielding and stress-tolerant crop varieties, fish species, and animal breeds, will be intensified. Innovators and discoverers of these mature technologies will be linked with prospective investors to facilitate technology transfer and adoption (*see Chapter 9*). Advanced and emerging technologies (e.g., biotechnology, genomics, nanotechnology) will also be explored to address the challenges and vulnerabilities of the AFF sector.

Intensify the provision of appropriate farm and fishery machineries, equipment, and facilities. The government will intensify its efforts in facilitating the use of farm and fishery machinery, equipment, and facilities based on the appropriateness of technology to local needs and conditions to raise the efficiency of farm operations and reduce production costs and post-harvest losses. In consideration of the new normal, more farm machinery and equipment will need to be provided, in lieu of manual labor, given the need to limit the movement of people and sustain the practice of social distancing.

In line with the implementation of the Agriculture and Fisheries Mechanization (AFMECH) Law, the Agriculture and Fisheries Mechanization Engineering Resource Network (AFMechERN) will be regularly updated to provide timely and reliable data on existing agri-fishery machineries, equipment, and facilities, as well as other mechanization-related information. The Agricultural Machinery Testing and Evaluation Center (AMTEC)⁹ in Los Baños, Laguna will be capacitated to expand its services for testing and evaluation of: (a) imported machinery and equipment for domestic distribution; and (b) locally-developed machinery and equipment prior to its commercialization as mandated by the AFMECH Law (*see Chapter 9*). The local manufacturers of equipment and machinery will also be supported by providing them with training on the design, fabrication, operation, testing, and evaluation of equipment and machinery, and providing appropriate incentives.

Enhance the capacity of farmers and fisherfolk to adopt new and better technologies. This will be done through a ladderized approach that includes: (a) establishment of technology demonstrations or learning sites to introduce and showcase the success of new or innovative technology using blended

⁸ AWD is a water-saving technology that farmers can apply to reduce their irrigation water consumption in rice fields without decreasing yield. Rainwater harvesting is the collection of rain or runoff for productive purposes. Solar powered irrigation uses the sun's energy to power a pump which supplies water to crops.

⁹ AFMech Law designated AMTEC as the premier and reference testing center of agricultural and fisheries machinery in the country. The law further states that AMTEC shall assist in the formulation of quality, safety, and performance standards of agricultural and fisheries machinery and provide technical assistance in the establishment of testing centers in other parts of the country.

learning platforms; (b) scaling-up of successful learning sites to serve as strategic demonstration areas for innovative and sustainable farming and fishing; and (c) development of these learning sites and expansion to farm tourism sites as additional livelihood opportunities for farmers and fisherfolk. SFFs will also be provided with quality advisory and technical services which include on-demand knowledge-sharing and advisory on production and post-production technologies through blended learning platforms.

Strengthen the AFF extension system as a whole.

To facilitate diffusion and increase adoption of modern, climate- and disaster- resilient/responsive technologies, an effective AFF extension system should be in place. To support this, the implementation of the following strategies will be strengthened: (a) improve competencies of agriculture extension workers (AEW), trainers, and other extension agents through continuous provision of capacity-building and retooling to enhance their knowledge and skills on recent AFF trends, technologies, and sustainable practices (e.g., organic agriculture, integrated farming systems, etc.); (b) develop new or modify existing extension modalities, methodologies, and approaches that are fit to the changing extension contexts (e.g., use of combinations of digital technology and traditional media or blended learning platforms, instead of face-to-face training); and (c) intensify accreditation of private extension service providers and training facilities to serve as partner organizations and venues. The DA will also engage in joint ventures and convergence with other government agencies (e.g., TESDA, LGUs, etc.), the business community, and other stakeholders in upgrading the operation, and improving the effectiveness of the AFF extension system and enhancing inter-institutional linkages between R&D and extension.

Increasing and protecting access of small farmers and fisherfolk to land and water resources

Fast-track and complete the parcelization¹⁰ of collectively-titled awarded lands and generation of individual titles to address investor uncertainty and facilitate investments in agrarian reform areas. The incomplete land ownership transfers to agrarian reform beneficiaries (ARB)–from collective to individual titles–has been a long-standing issue which erodes investor confidence on lands awarded under the Comprehensive Agrarian Reform Program (CARP). The parcelization process has encountered delays in the validation of individual ARBs listed in the collective Certificates of Land Ownership Award and in the identification of actual occupants of the subject landholdings. Legal issues are likewise confronted such as in the reconstitution of titles and inclusion/exclusion cases. To address this, the coordination and collaboration of the Department of Agrarian Reform (DAR) with CARP implementing agencies (IAs) should be strengthened with the intent of streamlining the parcelization process. In addition, the DAR and CARP IAs should be capacitated on the latest modern survey technologies and equipment to fast track the documentation and reconstitution of lost/missing titles and those with erroneous land surveys.

Strictly enforce and monitor the implementation of existing laws, rules, and regulations on land reclassification and conversion. The Joint Memorandum Circular¹¹ on the implementation of Memorandum Circular (MC) 54 should be revised to strengthen the land use reclassification process and the functions of concerned agencies. The inter-agency committee with representatives from the DA, the DAR, the Department of Human Settlements and Urban Development (DHSUD), the NIA, the Department of Environment and

¹⁰ Parcelization of landholdings with Collective Certificate of Land Ownership Award (CCLOA) is the process of subdividing and determining the exact metes and bounds of the areas, allocation of lots to ARBs in a CCLOA, determination of common use areas, portions with common service facilities, and establishment of areas capable of being alienated and disposed of by the government. (DAR, *Administrative Order No. 02 s. 2019*)

¹¹ HLURB, DAR, DA, and DILG, Joint Memorandum Circular, Prescribing the Guidelines to Implement MC 54 (*The Authority of Cities and Municipalities to Reclassify Lands Within the Limits Prescribed by Section 20 of RA 7160 Otherwise Known as the Local Government Code of 1991*), March 21, 1995.

Natural Resources (DENR), the Department of the Interior and Local Government (DILG), and the NEDA, among others, should also be reactivated. A database system will be developed as a repository of land reclassification information and as a tool for decision-making by the inter-agency committee. A MC on Section 65 of the Comprehensive Agrarian Reform Law (RA 6657) also needs to be issued to streamline and harmonize the actions of stakeholder government agencies on the land-use conversion process. These proposed measures will be accompanied by additional manpower both at the national and sub-national (i.e., regional, provincial) levels to enforce the rules and procedures and fast track the processing of land use reclassification and conversion.

Issuance of the guidelines by the BFAR on the delineation of municipal waters for LGUs with off-shore islands (*see Chapter 20*).

Establish a regulatory framework and formulate specific guidelines on implementing usufruct¹² arrangement for AFF purposes. While usufruct rights have been used in the Philippines for housing projects (e.g., Southville 3 Muntinlupa Housing Project and Taguig City Social Housing Project),¹³ this arrangement may also be explored for AFF purposes to aid in the optimal utilization of existing lands. However, there is a need to establish a regulatory framework and formulate specific guidelines to clearly define the usufruct arrangement for lands to be used for AFF purposes in order to protect the rights of farmers as well as the property owner.

Expanding access to markets of small farmers and fisherfolk

Increasing access to digitally-supported value chains

Provide efficient transport and logistics systems to link production areas to markets and ensure unhampered movement of A&F goods and services. This involves the establishment/construction of sufficient and strategically-located facilities such as wholesale food terminals and trading centers, warehouses, cold storage and refrigeration facilities, mobile storage, mobile marketplaces, rolling stores, foodbanks, and processing facilities that are linked with an interconnected transport system to ensure the continuous flow of A&F goods and services. Transport options should also be expanded to include the use of tramlines, cable lines, and animals to transport agricultural products as cost-effective alternatives, especially for linking remote upland communities to markets.

For fisheries, more Community Fish Landing Centers (CFLCs) will be established in strategic areas that will serve as landing and fish trading hubs. CFLCs will have post-harvest equipment and facilities to enable fisherfolk to preserve the good quality of their fish and fishery products and sell at a competitive price. CFLCs will also be opened as venues for skills training on fish processing, value-adding, and fisheries conservation and protection (*see Chapter 20 and Chapter 9*).

In addition to domestic logistics systems, international trade processes for A&F goods and services will be streamlined and enhanced to ensure non-disruption of flow of goods and services (*see Chapter 9 and Chapter 15*).

¹² Usufruct is the right to enjoy the property of another, with the obligation of preserving its form and substance, unless the title containing it or the law provides otherwise. (Article 562 Civil Code of the Philippines)

¹³ Anna Marie Karaos, Gerald Nicolas, and Gladys Ann Rabacal, *Innovative Urban Tenure in the Philippines: Challenges, Approaches and Institutionalization*, UN Human Settlements Programme, 2012.

Strengthen online marketing of agriculture and fishery products, including the establishment of online or digital channels for transactions and delivery services. With the continuing policy to practice social distancing under the new normal, supermarkets and retail establishments of A&F products will be encouraged to establish online or digital channels for transactions and delivery services. The DA can expand the reach of the recently launched *eKadiwa*¹⁴ to urban areas outside Metro Manila and expand the mode of payment and delivery service providers. In areas where food and grocery deliveries are not available, an online service delivery system where buyers send a list of items to buy to a *pabili* service provider may be explored as an option. Parallel to this, a registry system for online sellers or deliveries should be established to monitor and regulate the movement of people engaged in such transactions. Farmers and fisherfolk should likewise be encouraged to make use of digital payment systems (i.e., online or app-based financial technologies), particularly in receiving/accessing payments for their produce.

Organize small farmers and fisherfolk (SSF) into formal groups and promote farm and fishery consolidation and clustering arrangements to bring about economies of scale. Farm consolidation (e.g., sugarcane block farming, etc.) and clustering arrangements among small and medium growers will be promoted, particularly in production, processing, and value-adding activities to take advantage of communal inputs and economies of scale. By organizing SFFs into formal groups, this will increase access to support services (e.g., formal credit, modern farm technologies and machinery, capacity building, livelihood projects, etc.) and enable them to meet the demand of larger agribusiness enterprises and institutional buyers.

Link small farmers and fisherfolk groups to government nutrition programs (e.g., supplemental feeding programs, etc.), hospitals, and other facilities, as suppliers. Safe and nutritious A&F products such as fruits, meat, fish, vegetables, and dairy products can be supplied by SFF groups to school children or individuals and families affected by any disaster by linking SFF groups to supplementary feeding and relief programs of the government. The national government and LGUs will be encouraged to directly purchase from SFF groups to supply their food requirements for supplementary feeding programs and relief operations. Technical assistance, in terms of market matching and guidance in the government procurement process, should be provided. (*see Chapter 11*)

Intensify the implementation of the Philippine Competition Law and the Price Act to regularly monitor the price of food and essential commodities and address anti-competitive trade practices and illegal price manipulation. The Philippine Competition Commission (PCC) will be vigilant in monitoring anti-competitive practices that affect fair trade such as cartels, price-fixing, and market division/allocation, among others, to ensure fair competition in the market for the benefit of both consumers and businesses. The DA and the Department of Trade and Industry (DTI), in coordination with the LGUs and accredited consumer groups, will also intensify monitoring and enforcement activities to protect consumers from illegal price manipulation to ensure that prices of basic necessities (e.g., rice) and prime commodities,¹⁵ which include agricultural products, are at reasonable levels at all times.

¹⁴ The digital marketing platform of the DA's *Kadiwa ni Ani at Kita* which provides an easier and safer way for farmers and fisherfolk to sell their produce and access to fresh and nutritious agri-fishery products for consumers.

¹⁵ According to the Price Act (RA 7581), basic necessities include rice; corn; bread; fresh, dried and canned fish and other marine products, fresh pork, beef and poultry meal; fresh eggs; fresh and processed milk; fresh vegetables, root crops; coffee; sugar; cooking oil; salt; laundry soap; detergents; firewood; charcoal; candles; and drugs classified as essential by the Department of Health (DOH). Prime commodities, on the other hand, include fresh fruits; flour; dried processed and canned pork; beef and poultry meat; dairy products not falling under basic necessities; noodles; onions; garlic; vinegar; patis; soy sauce; toilet soap; fertilizer; pesticides; herbicides; poultry; swine and cattle feeds; veterinary products for poultry, swine and cattle; paper; school supplies; nipa shingles; sawali; cement; clinker; GI sheets; hollow blocks; plywood; plyboard; construction nails; batteries, electrical supplies; light bulbs; steel wire; and all drugs not classified as essential drugs by the DOH.

Increasing AFF-based enterprises

Strengthen AFF sector linkage to industry sector through innovative production, processing, value-adding, and marketing schemes. Pursue contract-growing arrangements, corporate farming, and other forms of linkages to integrate small farmers and fisherfolk and micro, small, and medium enterprises (MSMEs) into larger agribusiness enterprises. Consolidating or clustering SFFs and MSMEs will also allow product consolidation, expand supply to existing markets, and open up new markets, thereby increasing their income. To further enhance market access, the government will strengthen the conduct of market-matching activities, such as local (national, provincial, and regional) and international trade fairs, roadshows and exhibits, business trade missions, and other promotional activities (*see Chapter 9*).

Capacitate small farmers, fisherfolk, and MSMEs in diversifying into commodities with high value-adding and market potential. The transition period brought about by the liberalization of the rice industry offers an opportunity where uncompetitive rice farmers can pursue more profitable farm commodities. To support this, capacity building activities for diversifying into commodities with high-value adding and market value will be provided to SFFs and MSMEs. These activities will include processing, understanding markets, proper product handling and packaging, and ensuring food safety and quality standards. For instance, for coconut-based exports, the development of high-value by-products such as coco water, coco sugar, and other emerging product lines will be supported to maximize their export potential and help manage and reduce the impact of shocks brought about by volatility in domestic and world prices (*see Chapter 15*).

Adopt geographic indications (GIs)¹⁶ to improve the marketability and traceability of products and ensure quality standards. This is to increase and create awareness and knowledge on GIs, improve

the capacity of technical personnel and other stakeholders relative to the intellectual property component of GIs, and formulate the regulations for GIs (*see Chapter 9*).

Establish and/or update, and increase access of SFFs and other AFF stakeholders to timely and reliable agricultural market information systems. This should include the provision of information on prices, buyers, suppliers/sellers, and providers of ancillary services (e.g., trucking, packaging, warehousing, etc.) through the use of digital platforms and other appropriate media. This will guide their market decisions and facilitate networking among players in the value chain (*see Chapter 9 strategy on supporting business-matching activities*).

The utilization of ICT tools such as the Supply Chain Analytics (SCAN) Dashboard and SCAN Reporter should also be encouraged among AFF stakeholders to ensure the unhampered flow of goods and inputs. The SCAN Dashboard is an important tool for both the government and private sector to be aware of ground-level issues identified by supply chain players that need to be addressed. SCAN Reporter can help stakeholders report problems encountered in the supply chain (e.g., quarantine control point problem, permit-related problem, regulations, goods overpricing, and real-time road closures, traffic, and accidents) and submit such information to the dashboard.

Encourage the private sector to invest in agri-based enterprises. Particular attention will be given to the development of local and export markets for agricultural products (i.e., Halal and organic products). Public-private partnerships will be employed to pursue the establishment of agro-industrial hubs, A&F business incubators, and regional technology parks to support an environment that would foster innovation and technology transfer to facilitate a vibrant A&F technology-based entrepreneurial system.

¹⁶ Geographical indications are signs which identify a good as originating in a particular region or locality, where a given quality, reputation, or other characteristic of the good is essentially attributable to its geographical origin. GIs are considered a useful tool for economic growth and sustainable development, particularly in rural areas.

The implementation of the *Sagip Saka* Act of 2019 (RA 11321) will also be fast-tracked to provide SFFs with greater opportunities to engage in entrepreneurial activities through the implementation of the Farmers and Fisherfolk Enterprise Development Program under the law. Aside from providing various forms of assistance to SFFs (e.g., improvement of production and productivity, improvement of producers' and entrepreneurs' access to financing, access to better technologies, and provision of business support and development services), RA 11321 also encourages private sector partnership or alliances between farmers and fisherfolk to engage in enterprise development and improve market access of producer groups.

Strengthen community-based enterprises in upland communities. The government will continue to implement and monitor programs and projects that foster community-based enterprises in upland areas. Provision of training and extension support services in these areas will be through a farmer-to-farmer approach where farmers serve as extension agents and are part of technology generation and dissemination.

Increasing access to innovative, affordable, and adequate financing

Provide access to affordable formal credit to start, restore, sustain, and expand AFF-based livelihood activities and businesses. The outreach of formal private sector credit and other financial services will be extended through the facilitation of data sharing among lending institutions to determine the financial needs of SFFs, and target and prioritize areas where such interventions are most needed. Corollary to this, the financial literacy and credit worthiness of SFFs and agri-based MSMEs will be enhanced to help them avail of formal credit. Credit enhancement will be provided by the Philippine Guarantee Corporation (PhilGuarantee) through intensified advocacy and expansion of its agricultural guarantee services, as well as the establishment of more credit surety funds spearheaded by the BSP. Creation of the personal property security registry under the Personal Property Security Act will also be pursued (*see Chapter 15*).

Continue to implement credit programs with low interest and flexible terms for SFFs and AFF-based enterprises. The government will continue to develop and implement innovative and affordable financing facilities, such as the Production Loan Easy Access and Survival and Recovery Assistance programs of the DA, which prioritizes loans for marginalized SFFs at low-interest rates, minimal or no collateral, and fewer documentary requirements. The DA can also expand the Kapital Access for Young Agripreneurs (KAYA) to finance the capital requirements of start-up or existing projects of young agripreneurs which intend to reach out and convince Filipino youth to engage in AFF ventures. Moreover, SFF's awareness of available innovative and affordable credit programs will be increased through marketing and promotion activities (e.g., radio and TV plugs and guestings and print collaterals).

Expand agricultural insurance coverage. The institutional capacity and capitalization of the Philippine Crop Insurance Corporation (PCIC) need to be strengthened and augmented to expand the provision of agricultural insurance services. With its current manpower and budget, the PCIC was able to provide insurance coverage for only 3.1 million farmers and fisherfolk in 2019, as compared to the 10 million registered in the Registry System for the Basic Sectors in Agriculture (RSBSA). Also, because of limited budget and subsidies, increasing penetration rate among farmers has an apparent trade-off on the amount of insurance coverage, which is inadequate to cover production costs. Despite this, the PCIC will continue to expand coverage by engaging in partnership agreements with more LGUs, with the latter paying the insurance premium of farmers and fisherfolk not covered by RSBSA, while the registry is being updated. The PCIC can also expand coverage for other causes of default such as income loss from not being able to sell/market their produce and low prices. In terms of facilitating faster payouts of indemnity claims, the PCIC will continue to develop and commercialize the implementation of innovative index-based insurance programs.

Improving access of consumers to nutritious, affordable, and safe food

Enforcing food safety standards and regulations

Strictly implement food safety measures, quarantine procedures, and other existing rules and regulations in managing risks and addressing food safety and quality standards. Recognizing that risks may abound in all segments of the value chain, producers, processors, transporters (including online deliveries), vendors, and consumers will adopt food safety, quality, and quarantine measures. The measures allow traceability of products to support the targeting of regulations and regulatory actions to specific sources of risks. There is also a need to strengthen, harmonize, and streamline regulatory services and develop standards to ensure safe and quality products, facilitate trade, and promote ease of doing business. This will include the rationalization and strengthening of national and regional laboratories to guarantee accurate data on crucial laboratory test requirements for regulatory and enforcement purposes and standards development. Corresponding skills and competencies needed by the AFF stakeholders (e.g., SFFs, extension workers, etc.) on areas of sanitation and hygiene, good manufacturing practice (GMP), good agricultural practices (GAP), good aquaculture practices (GAqP), and good animal husbandry practices (GAHP) will be provided to ensure food safety and quality standards.

Increasing development and adoption of food preservation technologies

Develop processing and packaging technologies to prolong shelf-life and improve nutritional content of agriculture and fishery products. The shift in consumer preferences to healthier diets and the increased demand for processed food with longer shelf-life calls for further expansion of R&D programs focused on innovative technologies for processing and packaging. This can be done by intensifying support for public research

institutions, state universities, and colleges in producing safe, nutritious, medicinal, therapeutic, and well-packaged agri-food products that are commercially viable. Partnerships and joint projects with the DA, DOST, DTI, and the private sector may be explored to develop agri-food processed products with enhanced nutritional content and longer shelf-life.

Cross-cutting strategies

The following cross-cutting strategies will also be implemented:

Strengthen coordination and convergence of government agencies in undertaking joint planning, monitoring, and budgeting for priority programs and projects. Joint planning, monitoring, and budgeting among AFF-related agencies will be pursued to ensure complementation in the implementation of priority plans, programs, and projects. For instance, the DA, DTI, and other related agencies, in consultation with AFF/industry players, will work together in the formulation of commodity/industry roadmaps to complete the linkage between the AFF sector and the industry.

Utilize and regularly update the A&F management information systems as a strategic targeting mechanism for identification and prioritization of beneficiaries and agriculture-related programs and services (e.g., RSBSA, ABEMIS, etc.). Existing management information systems, such as the RSBSA, should be used as a primary reference in targeting beneficiaries of agriculture and fishery programs and projects. The RSBSA will also be regularly updated, harmonized, and cross-referenced with existing registries, such as the Municipal Fisherfolk Registry (FishR) of BFAR, *Listahanan* or the National Household Targeting System for Poverty Reduction (NHTS-PR) of the Department of Social Welfare and Development (DSWD). These registries will also be cross-referenced with the Philippine Identification System (PhilSys) when it becomes available.

The DA initiative on establishing an online platform for transparency, inter-agency data sharing, and a science-based approach to farm to market road (FMR) planning and implementation will be enhanced to develop an Integrated Road for Agriculture Development (IROAD) that will store, consolidate, and manage GIS-based data of all FMR projects implemented by the government. This will address issues on FMR locations and interconnectivity and eliminate duplication of activities – ultimately enabling farmers and other stakeholders to fully utilize and benefit from long, completed, and strategically-linked roads. It may further be harmonized with the Agricultural and Biosystems Engineering Management Information System (ABEMIS) of the Bureau of Agricultural and Fisheries Engineering (BAFE) which contains geotagged data on machineries and equipment provided, postharvest and logistics facilities established, and FMRs completed. These systems should be made available, accessible, and easily understandable by the AFF stakeholders to help them make informed decisions and guide future investments.

Institutionalize the El Niño Task Force as a permanent body rather than an ad-hoc task force, to ensure the preparedness of the AFF sector.

Promote agribusiness courses and training programs (e.g., farm tourism, enterprise development, etc.) under collaborative schemes with the academe, government, and business sector; and integrate agriculture, including the use of modern technologies (e.g., drones, smart greenhouses, and smartphone applications) in the elementary and high school curriculum to encourage the youth to engage in agriculture and fisheries (*see Chapter 10*). Support, in terms of financing of start-up or existing agri-based projects of young entrepreneurs and agri-fishery graduates, will be provided to transform them into agripreneurs.

Intensify activities on increasing resilience of the AFF sector to climate and disaster risks (*see Chapter 20*). There is a need to intensify efforts in

improving the resiliency of AFF to climate and disaster risks. In addition, the following shall be considered:

- Integrate climate and disaster risks in the design of AFF programs and projects. For example, local climate change trends and projections should be considered in the construction of disaster- and climate-resilient farm structures and retrofitting of existing ones (e.g., small-scale irrigation systems);
- Intensify AFF extension services that will increase adoption of climate- and shock-resilient technologies (e.g., smart greenhouses, varieties that are short-maturing, high-yielding, flood/drought-tolerant, and stress-resilient, etc.), animal breeds, and best practices (e.g., AWD technology, integrated pest management, diversified/integrated farming, etc.);
- Enhance the decision support tools of concerned agencies by providing timely and site-specific weather and climate advisories and utilize advanced and appropriate ICT to make it more available and accessible to stakeholders;
- Develop and mainstream the use of early warning systems and other anticipatory mechanisms (e.g., PRISM, etc.) that can help anticipate potential hazards and disturbances which can disrupt production operations. For instance, the use of drones and the subsequent information generated by the DA, before, during, and after disasters will be further enhanced and promoted to increase preparedness and response efficiency; and
- Provide non-farm livelihood options especially to seasonal and disaster-affected farm and fishery workers, SFF, and their families. Seasonal workers/farmers will be trained on off-farm and non-farm activities to enable them to take advantage of alternative employment opportunities, including involvement in farm tourism, fabricating fiberglass boats, mangrove forest reforestation, and mushroom production.

Legislative Agenda

The following legislative measures are necessary to support the actions of the executive branch:

Table 8.2 Legislative Agenda to Expand Economic Opportunities in Agriculture, Forestry, and Fisheries and Ensure Food Security

LEGISLATIVE AGENDA	RATIONALE/DESCRIPTION
National Land Use Bill	Under this bill, prime agricultural lands shall be protected through proper and rational delineation, classification or reclassification, allocation, establishment, utilization, and management. This will ensure the viability and sustainability of on-farm employment and rural development by determining a socially-acceptable minimum agricultural land requirement that would maintain a level of agricultural industry in a given economic or spatial context at a given point in time (see Chapter 20). Likewise, the bill will harmonize and/or strengthen the enforcement of land use policies on the conversion and reclassification of agricultural lands to non-agricultural use.
Establishment of the Coconut Farmers and Industry Trust Fund*	The bill aims to consolidate all assets and benefits emanating from the coconut levy and create a Coconut Farmers and Industry Trust Fund to exclusively benefit coconut farmers and farmworkers. It will create a Trust Fund Management Committee consisting of representatives from oversight agencies, that is distinct from the PCA Board, to remove the conflict of interest in the previous vetoed version of the bill where PCA is both the approving agency and utilizing agency of the proposed trust fund. A Coconut Farmers and Industry Development Plan will also be drafted to set the directions and policies for the development and rehabilitation of the coconut industry in the long-term.
Strengthening of the PCIC	There is a need to reorganize the PCIC and increase its authorized capital stock to cater to the demands of SFFs more effectively.
Magna Carta for Young Farmers	This measure aims to promote and protect the rights of young farmers, establish programs for young farmers, and institutionalize young farmers' representation in agricultural decision-making and policy-making processes. This would address the declining interest of the youth on agriculture and fisheries.

* Enacted into law on February 26, 2021.

LEGISLATIVE AGENDA	RATIONALE/DESCRIPTION
<p>Strengthening the Agricultural and Rural Financing System in the Philippines</p>	<p>This bill aims to amend the Agri-Agra Reform Credit Act of 2009 (RA 10000) by expanding the list of eligible projects and activities that can be funded by banks, as well as broaden the existing modes of alternative compliance, to allow banks to comply with their agricultural lending obligations. Diversifying the banks' lending portfolios will provide them with more options for investments and financing that will, in turn, increase the flow of finance and credit in the sector. It also aims to address the challenges in accessing formal credit by the agricultural sector owing to issues on bankability of projects, lack of technical expertise of financial institutions in agricultural financing, and the high levels of risk exposures of the sector.</p>
<p>Imposing Progressive Idle Land Tax</p>	<p>This is to promote the productive use of the idle lands, even if temporary, but without prejudice to the rights of owners to security of tenure.</p>
<p>Amendment of the Rice and Corn Law (PD 194)</p>	<p>This law places an unnecessary burden on foreign companies engaged in rice and corn by placing a time limit (30 years) on how long they may operate as 100 percent foreign-owned entities. After expiration of the allowed period, they are expected to divest in whole or in part (at least 60%) to Filipino citizens/local interests. There is a need to amend this law to attract foreign investments in the agriculture sector that will also provide employment opportunities to Filipinos.</p>

9A Expanding Economic Opportunities in Industry



Expanding Economic Opportunities in Industry

The country's vulnerabilities were put in sharper focus with the occurrence of natural disasters¹, water supply constraints², and the global health crisis caused by the COVID-19 pandemic at the beginning of 2020, requiring the government's urgent and strategic responses. This unprecedented period called on government to play a larger role in implementing appropriate stimuli to revive consumer and business confidence in the near-term and initiate measures that will enhance socioeconomic resilience in the medium-term. The refined Industry sector strategies are based on the need to operate under this new normal by leveraging Industry 4.0 technologies and ushering the growth of the digital economy.

To establish a healthy and resilient Philippines, the industry sector needs to rapidly operationalize the strategies under the Inclusive Innovation and Industrial Strategy (i3S, pronounced *eye-cube-s*). The i3S serves as a guide in setting a collaborative environment for and implementation of innovation-centered initiatives to boost the capacity of local enterprises. As a means to further improve consumer and business confidence in the medium-term, the i3S underscores the need to build up our human resource to utilize technologies, adopt inclusive business models to link smaller domestic-based firms to larger enterprises, strengthen the startup ecosystem to assist tech-based startups, particularly those inclined to develop health or industrial solutions in response to the current pandemic, and formulate business continuity plans (BCPs) for enhanced supply and value chain resilience. The urgent passage of structural reforms that cut across multiple sectors is needed to fast track a national digital transformation responsive to the current crisis.

Assessment and Challenges

Assessment: Over the past 3 years (2017 to 2019), the industry sector delivered tempered growth amid challenges in the external and domestic front. While industry gross value added (GVA) grew within the annual target range for 2019, the rest of the core industry-related indicators –

manufacturing GVA as a proportion of GDP, employment generated by the industry sector, and manufacturing employment as a proportion of total employment – missed their respective targets. In terms of employment, an average of 267,000 net employment has been created in 2019,

¹ Taal volcanic eruption occurred in January 2020. In the quarter leading to this, periodic seismic activities have been recorded in Mindanao and select areas across Luzon and Visayas.

² Challenges in water resource management has put in doubt the water supply sufficiency of the country's capital.

higher than 110,000 employment generated in 2016. However, it failed to reach its 2019 plan target of 437,000. The construction sector (287,000) significantly accounted for the industry employment creation in 2019 while the manufacturing sector recorded employment losses (-4,000) mainly attributed to the weak external environment during the period.

The country's overall ranking in the World Bank-International Finance Corporation's (WB-IFC) Ease of Doing Business (EODB) Report exhibited a rapid decline in the past three years, amid the more aggressive stance of other economies in advancing reforms and facilitating ease of doing business. On a positive note, this trend was reversed in 2020, with the country jumping 29 notches up to 95th out of 190 economies in the EODB Report. This is made possible by the government's policy initiative in protecting minority investors and improving the process of granting construction permits. On the consumer front, Filipinos' level of awareness of their basic consumer rights remains low, exacerbated by the country's archipelagic geography, which provides access to information on basic consumer rights difficult for those in remote and rural areas.

Challenges: Recent decline in industry output reflected lower domestic demand exacerbated by supply chain disruptions. Further, policy uncertainty related to institutional delays in the passage of reforms (e.g., Corporate Recovery and Tax Incentives for Enterprises [CREATE] bill, etc.) contributes to halted investment decisions. High innovation cost has also been a hindrance for the industry sectors to adopt new technologies, thereby limiting their capacity and potential to upgrade to the production of higher-value goods. Attracting new foreign direct investments (FDIs) is hampered by existing policies limiting foreign participation in critical support services sectors, which also curtails industry growth. The COVID-19 pandemic highlights the gaps in healthcare services (*see Chapter 10 for strategies to strengthen the country's health care system*), which affect the country's competitiveness and ability to attract investors and locators. New opportunities and challenges are also created with shifts in consumer preference and production towards essential goods and services. Lastly, industries have limited flexibility to respond to the impact of the pandemic, particularly in instituting new work protocols including repurposing and reconfiguring business operations.³

Targets

The government faces significant obstacles in meeting its succeeding industry-related annual targets. Given this, the industry sector GVA growth has been adjusted downward, considering

new assumptions in the period, as recognized and approved by the Development Budget Coordination Committee (DBCC) in July 2020.⁴

³ Some businesses were able to promptly undertake repurposing and reconfiguring activities to take advantage of shifts in consumer demand. For instance, the garments, electronics, and other manufacturing companies responded immediately to the need to produce COVID-19 critical products. The CONWEP (Confederation of Wearable Exporters of the Philippines) group shifted to the manufacturing of coveralls, gowns, and shoe and head covers while electronics firms repurposed operations to manufacture surgical masks and infrared thermometers. Liquor companies manufactured isopropyl alcohol and plastics firms produced face shields.

⁴ The DBCC projects the country's Gross Domestic Product (GDP) to contract by 2.0% to 3.4% in 2020. (Department of Budget and Management (DBM), "DBCC Revisits Medium-Term Macroeconomic Assumptions and Fiscal Program Amid the COVID-19 Pandemic," Press Release, May 13, 2020.)

Table 9A.1 Updated Plan Targets to Expand Economic Opportunities in Industry

INDICATOR	BASELINE VALUE (YEAR)	TARGETS			
		2020	2021	2022	END OF PLAN
Economic opportunities in industry across regions including the digital economy expanded					
GVA growth rate in the industry sector improved (%) ^a	8.2 ^b (2016)	8.0-9.0	9.8-10.8	6.3-7.3	6.3-7.3
Market production expanded					
Manufacturing GVA as a proportion of GDP increased (%) ^c	19.1 (2016)	24.7-25.3	16.6-16.7	16.8-17.0	16.8-17.0
Production capacities increased					
Employment generated by the industry sector increased ('000s) ^d	180 (2015)	440	400-500	200	2,303-2,403
Manufacturing employment as a proportion to total employment increased (%) ^e	8.3 (2016)	10.9	8.0-8.6	8.3-8.6	8.3-8.6
Competitiveness, innovativeness, and resilience increased					
Philippine overall ranking in the WB-IFC Doing Business Report improved	Top 54% (103 out of 189 economies) (2016)	Top 40%	Top 40%	Top 33%	Top 33%
Consumer access to safe and quality goods and services ensured					
Level of consumer awareness of basic consumer rights increased (%) ^f	74 (2016)	78	75	78	78

^a GVA at constant 2018 prices. GVA growth rate in Industry for 2019 and 2020 are based on the original DBCC targets as of July 2019. Note that Industry GVA growth rate for 2021 and 2022/end of plan (EOP) are consistent with the DBCC-revised figures as of July 2020.

^b National Income Accounts (NIA) as of August 2020.

^c Baseline (2016) and targets (2021 and 2022/EOP) are in line with the revised DBCC-approved GDP estimates (see Chapter 15) in the same period and rebased at constant 2018 prices. These are also within the Department of Trade and Industry Board of Investments (DTI-BOI) proposed targets (16.4-19.8% in 2021 and 16.9%-20.2% in 2022/EOP).

^d Employment generated refers to additional employment generated from the preceding year. Annualized employment generation for 2014 and 2015 refer to the average of estimates for April, July, and October survey rounds which excluded data of Leyte province. Further note that revision of target employment generation in industry for 2021 and 2022 is consistent with the revision of target total employment generation (see Chapter 4) and revision of labor productivity in industry (see Chapter 10) in the same period.

^e Revised manufacturing employment as a proportion of total employment for 2021 and 2022 is in line with the revised labor productivity in Industry (see Chapter 10) in the same period. These are also somewhat within the DTI-BOI proposed targets of 8.0% in 2021 and 8.4% in 2022/EOP.

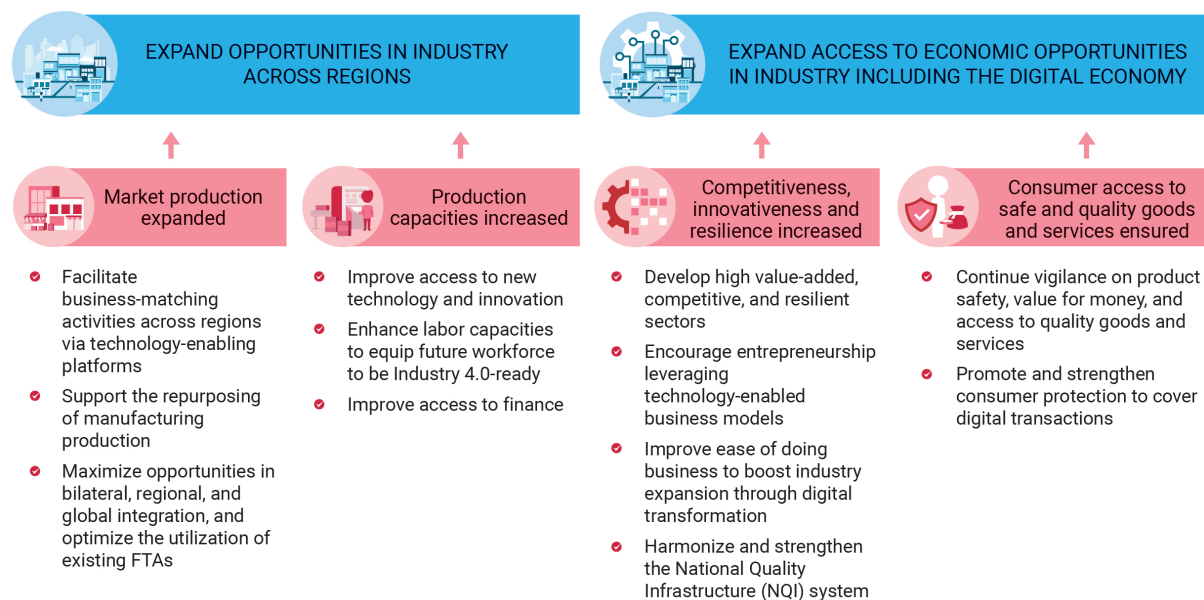
^f Revised downward targets in 2021 to 2022/EOP is due to operational constraints faced by the DTI-Consumer Protection and Advocacy Bureau (CPAB) in carrying out consumer advocacy efforts.

Strategic Framework

Under the new normal, the focus will be to revive business and consumer confidence in the immediate term. In the manufacturing sector, production of merchandise goods will favor necessities such as food, beverages, medicine, pharmaceutical and other chemical products, and other essential and complementary goods. Construction will now include building quarantine and other health facilities and rehabilitating existing ones to increase the capacity of the health care system. There may even be increased construction demand in the rural areas, as urban dwellers realize the advantages of less dense areas.⁵

As the economy further adjusts, reformulated strategies in the medium-term will harness the ability of the academe, the private sector, and the government to maximize the opportunities of the digital economy. This will require accessing new technology and innovation, building innovative talent, and encouraging entrepreneurship that uses technology-enabled business models to leverage opportunities and growth of budding small-scale enterprises.

Figure 9A.1 Strategic Framework to Expand Economic Opportunities in Industry



⁵ Inter-Agency Task Force for the Management of Emerging Infectious Diseases – Technical Working Group for Anticipatory and Forward Planning (IATF-TWG), We Recover As One (WRAO), National Economic and Development Authority (NEDA), 2020.

Strategies

Expanding economic opportunities in industry across regions

Expanding market production

Facilitate business-matching activities across regions via technology-enabling platforms.

- **Ensure efficient supply chain distribution and network across regions.** Support services will be provided to farmers, agro-processors, manufacturers, and exporters to facilitate the movement of goods in the domestic and external markets. The Supply Chain Regulatory Impact Assessments and Supply Chain Analysis (SCAN) Dashboard or other supply chain modeling system or framework for agricultural commodities will be utilized to monitor and address supply bottlenecks across the country coupled with close coordination among the implementing authorities, local government units (LGUs), and the private sector⁶ (see Chapter 8).
- **Provide technical assistance in mapping out value chains across primary, secondary, and tertiary industries to determine alternative suppliers and address production bottlenecks.** To complement the formulation of BCPs, the government will facilitate partnerships between micro, small, and medium enterprises (MSMEs) and large enterprises (LEs) in the process of identifying alternative domestic suppliers in lieu of external ones for enhanced value chain resilience.⁷ Utilizing digital platforms will

reduce transaction costs as it enables farmers, manufacturers, and suppliers to also gain access to domestic and external markets (see Chapters 8 and 9C).

- **Strengthen domestic investment promotion and support business-matching activities at the local level.** Investment Promotion services⁸ offered under Full Service *Negosyo* Centers will be scaled-up.⁹ Coordination between the LGUs and relevant national government agencies (NGAs) and its regional line agencies will also be enhanced to conduct business-matching initiatives (e.g., procurement matching) to link MSMEs to LEs in the region (see Chapter 9C).
- **Encourage the LGUs to adopt and implement their Local Investment and Incentives Code (LIIC)** (see Chapter 9C)

Support the repurposing of manufacturing production.

Prolonged uncertainty will sustain a shift in consumer preference towards essentials. While demand is likely to decline for traditional major export products, there are new opportunities for the country to be part of the production network for essential products (e.g., medical testing kits, personal protective equipment, surgical masks, etc.) (see Chapter 15 on Trade).

- **Establish a registry of firms that are or will be engaged in the manufacture of essential goods.** This will ensure that targeted support and assistance will be provided and will not overlap or duplicate with interventions being provided by various NGAs.¹⁰

⁶ IATF-TWG, WRAO.

⁷ The implementation of the Supplier Development Program (SDP) of the DTI-BOI and World Bank-IFC for the automotive, electronics, and aerospace sectors is a concrete example of how government can facilitate partnerships between local auto parts and electronics suppliers and the automotive and aerospace industry. The SDP links and capacitates the upstream segments to supply and comply with the technical requirements of the downstream industries.

⁸ On investment promotion, the following requires close coordination of the DTI-BOI and various IPAs with the LGU: (a) identify investment opportunities; (b) invite local investors to participate in investment-related activities; (c) disseminate investment-related information; and (d) invite local proponents to participate in the organized missions and matching.

⁹ Investment Promotion service only accounts for 0.03% of the total services rendered under *Negosyo* Centers.

¹⁰ The DTI Consumer Protection and Advocacy Bureau (CPAB) already has a registry of manufacturers of basic necessities and prime commodities which can be expanded.

- **Provide assistance in re-configuration of production areas, taking into consideration minimum public health standards for COVID-19 mitigation.** Across industries, reconfiguring work protocols in observance of proper sanitation, disinfection, and social distancing will be a challenge for sectors with higher concentration of employees per work area, such as in manufacturing and construction. The government will regularly conduct dialogues with the private sector to understand and respond to industry needs. It will also facilitate businesses' adoption of health protocols in the workplace to regain business normalcy while trying to flatten the infection curve. Adequate investments to enhance the country's information and communications technology (ICT) capabilities (*see Chapter 19*) and strengthen the country's healthcare system (*see Chapter 10*) will also be prioritized.
- **Reduce transaction costs by streamlining complex rules and regulations affecting business operations of companies that are repurposing.** Streamlining procedures for firms that will be repurposing their activities towards the production of essential goods and delivery of critical services will be prioritized. Clear and transparent rules and guidelines will be drafted and implemented in the process of obtaining licenses and certificates. In addition, a regulatory framework for the production of these essential goods (e.g., PPEs) will also be formulated and enforced.

Maximize opportunities in bilateral, regional,¹¹ and global integration and optimize the utilization of existing FTAs (*see Chapter 15*).

Increasing production capacities

Improve access to new technology and innovation.

- **Support research and development (R&D) applications in the manufacturing sector as part of the shift in business processes.** Recent studies point out that high fixed capital and licensing costs are the biggest barrier to technology upgrading for producers in the electronic and electrical (E&E) subsector.¹² However, the current environment underscores the urgency of technology upgrading in the manufacturing sector.¹³ As part of government support, an array of technical and financing options will be made available, particularly for those inclined to develop health or industrial solutions in response to the current pandemic. Technical support will include refocusing public-funded R&D to the application of innovative industrial solutions. Targeted fiscal incentives (e.g., tax credits for R&D activities) will also be considered in line with the provision of the CREATE bill. The patent search services¹⁴ of the Intellectual Property Office of the Philippines (IPOP HL) will also be promoted to connect with the R&D units of enterprises.
- **Address constraints in the energy and water sectors by leveraging innovation.** As the rapid pace of urbanization continues, the country's major cities will keep facing constraints in the use and management of basic resources (i.e., electricity, gas, and water). Public-private partnerships (PPP) will be encouraged to invest ahead using available technologies. While long-term water supply and resource management is being improved,

¹¹ Startups from the Philippines may reach out to the ASEAN Business Incubator Network (ABINet) which enables startups to network with other startups in ASEAN, and even provides potential contact with venture capitalists.

¹² World Bank (WB), *Philippines Digital Economy Report 2020: A Better Normal Under COVID-19 - Digitalizing the Philippine Economy Now*, World Bank, 2020.

¹³ For instance, R&D support is needed by semiconductor firms to be able to customize electronic components in order to supply automobile spare parts needed by domestic producers of e-vehicles.

¹⁴ IPOP HL's patent analytics and landscaping efforts, and patent information search initiatives are means of assisting innovative enterprises and research and development institutions as well as government agencies that create policies and grant science and technology funding. IPOP HL will scale up the capacity of business enterprises and other R&D institutions to conduct search while it innovates on its processes and modes of delivery of patent search services.

real-time water quality monitoring as well as small-scale water recycling systems in the interim will be explored to effectively service households and businesses in major urban areas. As regards energy, the government will ensure continuous supply of power through increasing the country's dependable capacity (in megawatt) (*see Chapters 9C and 19*).

- **Reduce online participation costs for businesses and consumers.** Adopting technology-enabled business models offers significant opportunities for manufacturing firms, particularly MSMEs, as it offers an alternative means to access markets (*see Chapter 9B*). Foremost, digital connectivity and infrastructure will be improved to reduce the cost of broadband and internet services¹⁵ (*see Chapters 9B, 9C, and 19*). Consumer rights protection in e-commerce and cybersecurity enforcement activities will also be strengthened to build consumer and business confidence in these platforms.¹⁶ Lastly, investment in the country's logistics system will be scaled up (*see Chapter 9B*) and the security of digital payment platforms will be ensured.

Strengthen industry-academe linkage by prioritizing market-driven research, development, and innovation (RD&I) activities and accelerating commercialization of R&D investments. Public sector funded R&D will be redirected towards industrial innovations, especially for those in response to COVID-19. In addition, the procurement conditions set in the Government Procurement Reform Act (GPRA) will be streamlined to fast-track procurement

of laboratory equipment needed for RD&I activities of state universities and colleges (SUCs) and research and development institutions (RDIs). Technology managers from the public sector will be capacitated to promote, negotiate transfer of technologies particularly for government-funded R&Ds, and spot anti-competitive clauses in technology transfer agreements (TTA).¹⁷ The innovation and technology support offices (ITSOs) within the universities, other higher education institutes, and research and development institutes under the ITSO 2.0 program¹⁸ of the IPOPHL will also be scaled up. Further, the IPOPHL's designation as an international authority under the Patent Cooperation Treaty (PCT) will facilitate the entry of Filipino innovations to the global patent system (*see Chapter 14*).

Monitor and scale-up efforts to support innovation capacities of startups and MSMEs in the regions by expanding the Regional Inclusive Innovation Center (RIIC) pilot areas. The RIICs, as part of the Philippine i3S strategy, will promote the adoption of appropriate technologies in existing industry clusters. The RIICs aim to improve supply chain, value-adding and agro-processing, access to technologies, financing, regulating, and certifying high-value crops such as rubber, mangoes, coffee, cacao, and coconut. Currently, RIICs are being piloted in Cebu, Davao, Bicol, and Cagayan de Oro, for possible replication in other regions.

- **Facilitate industry adoption of appropriate technologies including local R&D solutions and technology-enabled business models** (*see Chapter 9C*).

¹⁵ Department of Information and Communications Technology (DICT) has ongoing policies and programs that aim to reduce costs of broadband and internet services: roll-out of the third telecommunication player's program and Common Tower Policy.

¹⁶ DICT has a Cybersecurity Bureau that develops cybersecurity policies and coordinates with other agencies on consumer rights protection of citizens.

¹⁷ Technology Transfer Arrangement, by definition, is the process by which one party systematically transfers to another party the knowledge for the manufacture of a product, the application of a process, or rendering of a service, which may involve the transfer, assignment or licensing of intellectual property rights as defined in the Philippine Technology Transfer Act of 2009 (RA 10055). The law covers all institutions that implement government-funded R&Ds and intends to promote and facilitate the transfer, dissemination and effective use, management, and commercialization of intellectual property, technology and knowledge resulting from R&D funded by the government.

¹⁸ IPOPHL, in recent years, developed a network of 100 ITSOs composed of higher education and research development institutions. This program seeks to foster creation of intellectual property in the academe and research sectors, particularly in invention and utility models, to increase the national innovative output and to push the presence of Filipino inventions in the international patent system. It is set up to also strengthen support for MSMEs as the ITSOs extend technical assistance to MSMEs and local inventors as regards trademark and patent searches as well as drafting of patents, utility models, and industrial design documents.

- **Conduct an inventory of existing DOST-approved or government-funded production technologies for possible scale-up** (see Chapter 14).
- **Promote linking startups and MSMEs to cooperatives and LEs to enhance value and supply chain resilience and spur innovation** (see Chapter 9C).
- **Integrate sustainable consumption and production (SCP) processes.** A sustainable consumption and production approach through the adoption of clean, renewable energy, and smart technologies in industry operations is supported (see Chapter 20 for detailed SCP strategies). Adherence to SCP is a unique opportunity for strategic marketing and branding that will set apart the country's products and services offering in the global market. In the construction sector, the Sustainability Incentive Program will be promoted to reduce greenhouse gas emissions in built environments, and for construction of disaster-resilient infrastructure. Particularly for public infrastructure programs and projects, applying the Comprehensive and Integrated Strategic Environmental Assessment will be advocated. R&D, in the use of alternative sustainable materials in the construction sector, will also be pursued (see Chapter 19).
- **Encourage the local development, manufacturing, and distribution of farm machinery through the government's Farm Mechanization Program (FMP).** The program will encourage the local development, manufacturing, and distribution of farm machinery. The implementation of this program will also hasten the commercialization and utilization of existing farm machinery technologies already developed by the Department of Agriculture (DA) Philippine

Center for Postharvest Development and Mechanization's (PhilMech) local accredited partners (see Chapter 8).

- **Strengthen cybersecurity and data privacy measures in the public sector and build efficient digital infrastructure (hard and soft).** To mitigate potential risks and threats, cybersecurity and data protection will be interwoven in the government's policies and programmatic areas of intervention.¹⁹ Ramping up investment on efficient digital infrastructure and pushing for structural reforms to allow greater competition in these key sectors will also be prioritized (see Chapters 9B, 16, and 19).
- **Strongly enforce intellectual property (IP) rights to encourage firm innovation.** The enforcement of IP rights is necessary to guarantee that inventors and firms would be able to reap the benefits of their inventions and creations.²⁰ Moreover, strong IP enforcement will attract foreign industries that utilize sophisticated technologies to relocate their production hubs in the country (see Chapter 9C).

Enhance labor capacities to equip the future workforce to be Industry 4.0-ready.

- **Develop human resource development (HRD) blueprint to equip future workforce to be Industry 4.0-ready.** The HRD strategy for the entire country will be formulated starting with priority sectors.²¹ The crafting of a Human Capital Development and Skills Training Cooperation Roadmap consistent with the Philippine i3S and its Inclusive Filipinnovation and Entrepreneurship Roadmap will lay a unified blueprint, incorporating various initiatives on human resource development and capacity-building.

¹⁹ A unified platform with which the DICT and its cybersecurity partners from the private sector may be able to assist government agencies with cybersecurity threats, attacks, and other issues.

²⁰ WB, *Philippines Digital Economy Report 2020*.

²¹ The HRD blueprint can take off from the 12 priority sectors under the Philippine i3S, broadly aligned with the *AmBisyon Natin 2040* priority sectors: housing and urban development (construction), manufacturing, connectivity (ICT, transport and logistics), education services, tourism and allied services, agriculture, health and wellness services, and financial services. (NEDA, "About *AmBisyon Natin 2040*," *AmBisyon Natin 2040* Website.)

- **Build innovative talent focusing on the acquisition of soft and hard skills with focus on science, technology, engineering, arts, and mathematics (STEAM), ICT, and digital-related competencies.** Digital transformation requires the reinvention of businesses' workforce and necessitates investment in digital education. In the immediate term, the Technical Education and Skills Development Authority (TESDA) and other relevant government agencies, including LGUs, will proactively collaborate with the private sector to design remote on-the-job trainings and apprenticeship programs to support the creation of digital careers. For the future workforce, critical support in the early stages of childhood development through the acquisition of essential life skills and foundational abilities with a focus on lifelong learning will be prioritized (see Chapter 10).
- **Improve ease of labor mobility.** COVID-19 compelled countries to restrict travel and people mobility as part of efforts to flatten the infection curve. Once infection is managed, labor mobility within Southeast Asia, as part of the Association of Southeast Asian Nations (ASEAN) Community Vision 2025, will be pursued. Mutual Recognition Arrangements (MRAs) will help Filipino professionals acquire new knowledge and experience overseas and create new networks for professional growth.

Improve access to finance (see Chapters 9C and 15 for detailed strategies).

Expanding access to economic opportunities in industry including the digital economy

Increasing competitiveness, innovativeness, and resilience

Develop high value-added, competitive, and resilient sectors.

- **Strengthen the implementation of the Philippine i3S.** The i3S aims to strengthen the linkages of agriculture, industry, and services through innovation and deepen forward and backward linkages across these major economic sectors and induce global value chain participation. The i3S prioritizes the growth and development of 15 major industries identified to benefit from closer integration of agriculture, industry, and services and from the adoption of innovative applications: (1) auto and auto parts; (2) chemicals; (3) agribusiness; (4) furniture, garments; (5) creative industry; (6) iron and steel, tool, and die; (7) electronic and electrical manufacturing services; (8) shipbuilding and ship repair; (9) aerospace parts and aircraft maintenance; (10) construction; (11) transport and logistics; (12) tourism; (13) information technology and business process management (IT-BPM); (14) e-commerce and digital economy; and (15) climate change products, mobility solutions, health, education, and smart cities.

Developing these priority sectors will increase the country's competitiveness amid global market uncertainties by operationalizing the Innovation Memorandum of Understanding (MOU) between relevant NGAs²² and closer coordination and collaboration with the academe and the private sector.

- **Provide assistance and facilitate funding for industries and enterprises as they create smart factories, adopt automation, and shift to Industry 4.0 technologies.** The application of new and smart technologies such as automation,

²² The DTI, Department of Science and Technology (DOST), DICT, NEDA, Department of Education (DepEd), DA, and Commission on Higher Education (CHED) signed the Memorandum of Understanding (MOU) on October 2, 2018, to further the Inclusive Filipinnovation and Entrepreneurship, a declaration of understanding by the agencies to collaborate and coordinate in formulating and implementing the Inclusive Filipinnovation & Entrepreneurship Roadmap, which aims to develop the country's innovation and entrepreneurial ecosystem via enhancing the linkages between academe/research community, industry, and government.

robotics, artificial intelligence (AI), industrial internet of things (IoTs), big data analytics, additive manufacturing, and cloud computing in the identified priority industries under the i3S, will enable firms to produce innovative goods and services. Support will be made available to firms that will invest in customization, scaling-up, and adoption of new production technologies to take advantage of opportunities under the new normal, in particular:

- Establishment of an Industry 4.0 pilot factory and Industry 4.0 Small and Medium Enterprise (SME) Academy that will serve as learning facilities providing Industry 4.0 training and technical support to companies transitioning to utilize Industry 4.0 technologies;
 - Allocation of funding programs (e.g., soft loans) and appropriate incentives to support companies' digital transformation plans and investments consistent with the CREATE provisions; and
 - Provision of technical support in conducting Industry 4.0 assessment through the Smart Industry Readiness Index (SIRI).²³
- **Address industry value chain gaps by encouraging sustainable use of raw materials along with parts, components, and intermediate products and linking manufacturing with knowledge-intensive services.** The lack of sustainability in production processes, inadequate processing (resulting in

non-conformance to standards prescribed by processors), challenges in logistics, warehouse and storage facilities (*see Chapter 9B*), and internal firm factors, such as lack of human resource capabilities (*see Chapter 10*) and low technology adoption have been identified as gaps in the country's manufacturing sector. Adequate investment in acquisition of technology licenses, adoption of innovative and sustainable manufacturing processes,²⁴ support for private sector investment in logistics through low-cost financing and upgrading of skill competencies related to manufacturing are critical requirements (*see Chapter 8 for related strategies on the agriculture, forestry, and fisheries [AFF] sector*). At the international level, the government will continuously dialogue with regional and global cooperation partners to ensure non-disruption of medical and food supplies including eliminating tariffs and other restrictions on essential goods²⁵ (*see Chapter 15*).

- **Reduce the cost of logistics.** The high costs of logistics account for 27 percent of revenues of manufacturing firms in the Philippines compared to Indonesia (21%), Vietnam (16%), and Thailand (11%) based on estimates of the International Finance Corporation (IFC). This disproportionately affects smaller enterprises as they operate on a smaller scale and usually face high shipping and delivery costs when importing smaller shipments.²⁶ Strategies for enhancing logistics services are discussed in Chapter 9B.

²³ Smart Industry Readiness Index (SIRI) is developed in Singapore and is the first self-diagnostic Industry 4.0 tool that helps companies globally – regardless of size and industry – determine how to start, scale and sustain their Industry 4.0 transformation. The tool serves as a benchmark for manufacturers to assess and compare their Industry 4.0 maturity levels against those of their peers in the same industry. (<https://siri.gov.sg/>)

²⁴ A concrete example in pushing forward sustainable production in the manufacturing sector is the National Ecolabelling Programme – Green Choice Philippines (NELP-GCP). The NELP-GCP is a voluntary, third-party ecolabelling programme that follows the guidelines set by ISO 14020 and ISO 14024. Through a multi-sectoral process, the programme provides criteria for environmentally-preferable products which can be used as a guide for consumers and institutions for product selection. Ecolabelling and green purchasing is just the first step to create awareness on sustainable consumption and production practices. To further promote and patronize ecolabeled products and services in the public sector, the Philippine Green Public Procurement Roadmap has been launched by the Government Procurement Policy Board (GPPB) in 2017. Encouraging green procurement in the public sector is critical as this will create demand and will concretely lay down green purchasing policies. (GPPB– Technical Support Office. *The Philippine Green Public Procurement Roadmap*. GPPB-TSO, 2017)

²⁵ Strengthened cooperation is necessary to keep medical supply lines open and prevent harmful measures that will affect the trade of medical goods. (Rhea C. Hernando and Emmanuel A. San Andres, "APEC in the Epicentre of COVID-19," Policy Brief No. 31, APEC Policy Support Unit, April 2020)

²⁶ WB, *Philippines Digital Economy Report 2020*.

- **Maximize the country's opportunities to penetrate the global Halal market.** The Philippine Halal industry, another sector offering opportunities for higher value-adding, can be an instrument for sustainable growth and inclusive development in the Bangsamoro Autonomous Region in Muslim Mindanao (BARMM) and the rest of Mindanao. Financing and technical assistance for Halal firms' digital-based businesses will be prioritized. The implementation of the Philippine Halal Export Development and Promotion Act of 2016 (RA 10817) will provide assistance to Halal industries to ensure compliance with Halal technical standards and provide common service facilities in strategic production areas. Further, the Department of Foreign Affairs (DFA) Foreign Service Posts will be utilized in conducting market research and intelligence for potential opportunities for the development of the Philippine Halal industry and other relevant information to expand market access.
- **Strengthen collaboration and monitoring of the implementation of various industry roadmaps.** Stronger collaboration of the various industry clusters across the regions, coupled with adoption of appropriate innovation and periodic monitoring of industry roadmaps will ensure that all stakeholders are on track towards producing higher value output to achieve the roadmap targets set.
- **Build capacity in preparing BCPs across industries.** The ability to tap alternative suppliers and beef up inventory capacity will insulate enterprises against vulnerabilities. Support will be provided by capacitating firms to prepare their customized BCPs²⁷ (see Chapters 9C and 10). A sound legal framework for telecommuting and alternative work arrangements will be applied as relevant to industry operations (see Chapter 10).
- **Boost infrastructure development by fast-tracking implementation of Build Build Build (BBB) projects aimed towards improving the country's healthcare system, digital and power infrastructure, among others** (see Chapter 19 on Infrastructure).
- **Adopt a policy framework to promote geographic indication (GI) system to boost production of local agricultural products with unique characteristics attributable to its geographic origin, human factors, or indigenous knowledge (e.g., pili nuts of Bicol, Guimaras mangoes, etc.).** The GI highlights the competitive advantage of origin-linked qualities, reputation, and other characteristics of products including traditional practices or local know-how in their production that can translate into economic benefit of local farmers or producers. As a starting point, technical capacities of relevant agencies and stakeholders will be strengthened. Information dissemination and creation of a policy framework on this initiative will be pursued²⁸ (see Chapter 8).

Encourage entrepreneurship leveraging technology-enabled business models.

- **Allow firms in new technologies and industries to test their products and business models through regulatory sandbox.**²⁹ Compliance and regulations will be flexible and suited to the pace of growth of the most innovative companies which will be balanced by sufficient checks to ensure consumer protection.
- **Provide a supportive policy environment for entrepreneurs and startups.** Further supporting

²⁷ National Wages and Productivity Commission (NWPC) commits to implement the Productivity Toolbox to sharpen the productivity perspective of BCPs such that BCP activation should not only mitigate impact of disruption but should also unlock workforce productivity

²⁸ The Intellectual Property Code of the Philippines (RA 8293) has already stipulated that GIs are examples of intellectual property rights. The Bureau of Trademark under the IPOPHL is in-charge of the "search and examination of the applications for the registration of marks, geographic indications, and other marks of ownership and the issuance of the certificates of registration."

²⁹ Regulatory sandboxes or testing grounds for emerging industries will require a high degree of regulatory flexibility, market openness, and a competitive policy environment. Further supporting the growth of emerging industries may spur innovation but may also cause disruption to traditional sectors (e.g. growth of fintech that may disrupt traditional financial sector).

individuals starting up their own businesses – particularly youth, women and persons with disabilities—will require a supportive policy environment from the national and local government. Blended finance or the strategic use of development finance to mobilize additional funding for sustainable development will be tapped.³⁰ For instance, blended finance that offers “gender lens investing plan”—encouraging investment in activities that positively affect women – will be explored and scaled-up. Access to other types of innovative financing for startups and MSMEs, as well as cooperatives will also be expanded to enable them to operate under the new normal (*see Chapter 9C*). Technopreneurship will also be considered in the implementation of the *Balik Probinsya Bagong Pag-asa* (BP2) Program, to address livelihood and job scarcity as support to regional growth and development (*see Chapter 18*).

- ***Pursue convergence among various government initiatives and flagship programs for startups, micro, and small enterprises and cooperatives*** (*see Chapter 9C*).

Improve ease of doing business to boost industry expansion through digital transformation.

- ***Address regulatory bottlenecks by streamlining permitting and licensing processes across industries.*** Effectively streamlining regulatory processes will attract further investments and boost output. Further streamlining of procedures and reducing the number of days in granting permits and other licensing requirements, will be implemented to

support restarting businesses or existing firms applying for permit renewals. Specific regulatory bottlenecks for the food manufacturing industry (FMI), which accounts for more than a third of the manufacturing sector, are currently being addressed.³¹ In the construction sector, permitting and licensing can be streamlined in line with the proposed Philippine Building Act.

- ***Encourage digitalization in government processes to support industry growth.*** Fast-tracking the implementation of e-governance projects, especially in terms of government to business (G2B) electronic services, is paramount in supporting the shift to the new normal (*see Chapter 5*). Full implementation of TradeNet, the online platform for the Philippine National Single Window (NSW), will digitize trade processes, including online payment systems, in simplifying trade (*see Chapter 15*). The government will likewise fully implement the electronic Business Permits and Licensing System (eBPLS) project, providing the LGUs across the country with software that digitizes the application of business permits and licenses. The shift to online business registration for Securities and Exchange Commission (SEC), DTI, and other relevant NGAs will also be fast-tracked. Government digital platforms will consider interoperability for shared access by relevant national and local government units while ensuring appropriate cybersecurity protocols. Utilizing e-payment channels for government transactions will be prioritized.
- ***Speed up implementation of Energy Virtual One-Stop Shop (EVOSS) (RA 11234) and the***

³⁰ The Australian Department of Foreign Affairs and Trade has just established the Emerging Markets Impact Investment Fund (EMIIF) which will be accessible to financial intermediaries in countries like the Philippines. The EMIIF intends to invest in funds for SMEs, or in financial intermediaries such as banks who, in turn, will lend to SMEs. A unique feature of the EMIIF scheme is a “gender lens investing” plan that will encourage investment in activities that positively affect women. Thus, EMIIF will either: (a) make available non-grant instruments to invest in SME funds, with the goal to play the role of an anchor fund from which other funds will be crowdsourced; or (b) use its funds to directly assist and support SMEs.

³¹ Some of the concrete measures for improvement: (a) operationalize a one-stop processing venue for the various certifications required by various food safety regulatory agencies (FSRAs) utilizing online platforms and digital payment channels; (b) shorten turn-around periods of processing and issuing clearances, permits, or other required certifications to address regulatory compliance including a thorough review to streamline the FSRA processes; and (c) update current standards and protocols for food regulation aligned with internationally recognized standards and protocols to address product safety and quality concerns of consumers. (Nerlita M. Manalili, et. al. “Scoping Study on Reducing Unnecessary Regulatory Burdens in the Philippine Food Manufacturing Industry,” *Discussion Paper Series No. 2017-23*, Philippine Institute for Development Studies, June 2017.)

Energy Investment Coordinating Council (EO 30) to address delays in the implementation of energy infrastructure projects. These policies will streamline permitting processes for energy projects, including power generation, transmission, and distribution at the local level by utilizing online platforms (see Chapter 19).

Harmonize and strengthen the National Quality Infrastructure (NQI) System.

- **Pursue passage of the NQI Law** (see Chapter 9A Legislative Agenda). The current fragmented nature of the country's NQI System limits the capacity of local manufacturers to comply with global technical regulations and product standards.³² A unified NQI system, through passage of this law, will harmonize the country's standards, technical regulations, metrology, accreditation and conformity assessment procedures (e.g., testing, calibration, inspection, and certification), packaging, and labeling to be at par with international standards. As a parallel activity, the technical regulation regime will be reviewed and adjusted, including its related legislation, to meet regional and international requirements promulgated under the regional trade protocols, the World Trade Organization Technical Barriers to Trade (WTO-TBT), and Sanitary and Phytosanitary Measures (SPS) agreements along with other international best practices.³³ The service delivery of the NQI is dependent on a trained and skilled workforce. Hence, developing the human resources necessary to support the various standardization, quality, and technical regulation programs is also supported.

- **Provide more dispersed access points for common service facilities including laboratories, calibration, and testing facilities for MSMEs especially in the regions** (see Chapter 9C). MSMEs across regions will be provided greater access points to common service facilities to encourage and support their NQI compliance and adherence.
- **Intensify targeted awareness and information dissemination on the benefits of accreditation for firms engaged in essential sectors and emerging industries.** Under the new normal, business accreditation and compliance with domestic and international standards and conformance will be promoted for essential sectors (i.e., healthcare, food safety and food testing, etc.), as well as emerging industries (i.e., manufacturing PPEs, test kits, and other health testing instruments, etc.).

Ensuring consumer access to safe and quality goods and services

Continue vigilance on product safety, value for money, and access to quality goods and services.

- **Strengthen institutional and human capacities of key agencies to enforce regulations and enhance consumer awareness on the safety and quality of products and services.** The capacity of responsible units under the Department of Health (DOH),³⁴ DA,³⁵ and DTI,³⁶ to fulfill their mandates, to enforce and advocate for higher standards of safety and quality of goods produced³⁷ will be strengthened. Measures to increase consumer awareness will be scaled-up, leveraging digital platforms.

³² An assessment of the NQI in the Philippines and the corresponding support for institutional capacity of both government and the private sector will be pursued to ensure harmonization of domestic standards and regulations at par with global standards.

³³ This will include the establishment of effective cooperation amongst the NQI institutions and the national regulatory authorities, and also with their regional and international counterparts.

³⁴ The DOH through the Food and Drug Administration (FDA), establishes standards for processed food, drugs, and cosmetics.

³⁵ The DA's Bureau of Agriculture and Fisheries Product Standards (BAFS) develops standards for agriculture and agriculture-related products including fruits and vegetables and grains.

³⁶ The DTI's Bureau of Philippine Standards (BPS) formulates standards for food and other categories including building, construction, and transport products; electrical and electronic products; and chemical and consumer products. It is mandated to develop, implement, and coordinate standardization activities in the country and works with DOH and DA on this area.

³⁷ Periodic exchange programmes among ASEAN Member States (AMS), for instance, will build national capacity and encourage these agencies to pursue a higher standard of quality awareness and consumer protection in ASEAN.

- **Prioritize procurement of ecologically responsible products and services that are domestically produced and at par with international quality and standards.** In the public sector, enforcing Rule XII, Section 43 of the Revised Implementing Rules and Regulations (IRR) of the GPRA (RA 9183), will help the growth of local industries that produce safe and quality goods and services at a competitive cost. As a whole, *Go Lokal!* and similar *buy Pinoy* initiatives will enable domestic industries to bounce back under the new normal. Green or sustainable procurement will also incentivize greening industries that will contribute to sustainable economic growth (see Chapter 20).

Promote and strengthen consumer protection to cover digital transactions.

- **Amend the Consumer Act to strengthen protection for consumers.** The law will be updated to provide stronger measures that will enhance consumer protection from dangerous and hazardous products and abusive sales practices. Foremost, the DTI will be given the mandate to effectively monitor the quality and safety of products being sold in the market; halt the proliferation of substandard and potentially dangerous products by being granted the authority to declare, *motu proprio*, certain products as unsafe, issue preliminary preventive or mandatory orders and recommend the closure of erring businesses.

Almost three decades since the existing law has been passed, it will be updated, to cover consumer protection on ICT and e-commerce and improve pre-adjudication consumer redress mechanisms, including an effective return and refund policy.

- **Engage relevant consumer welfare organizations.** Regular engagement and continuous dialogue among the government, non-profit consumer organizations, and other relevant non-profit private organizations will be established. These organizations are critical partners of the government in ensuring that products and services in the domestic market comply with safety and quality requirements based on the Philippine National Standards,³⁸ technical regulations, and other trade and industry regulations.
- **Formulate and enforce policy framework/guidelines for online sellers and buyers to spur e-commerce growth.** E-commerce will likely remain part of the post-pandemic reality. To ensure safe and reliable e-commerce transactions, updating of joint circulars issued by the DTI, DA, DOH, and other relevant government agencies that enforce consumer protection policy in e-commerce will be prioritized (see Chapter 9B). Use of virtual modes or digital platforms in handling consumer complaints and dispute resolutions will be promoted.

³⁸ The Philippine National Standards (PNS) is a publication of various consumer products that follow a standard documentation format aligned with the ISO documentation format. It also covers mandatory labelling and packaging and prescribes all the standards and required information for domestically produced consumer products

Box Article 9A.1 Strengthening Economic Zone Development Program

Administrative Order (AO) No. 18 s. 2019, "Accelerating rural progress through robust development of Special Economic Zones in the countryside", and Executive Order No. 114, the "*Balik Probinsya Bagong Pag-asa Program*," are perceived as complementary measures. The successful implementation of both will enable the creation of more ecozones in the countryside which will boost job generation and improve employment prospects of rural and *Balik Probinsya* beneficiaries.

In response to the COVID-19 pandemic, the following are proposed policy responses in support of Economic Zone Development Program under the new normal:

- Encourage PPP, joint ventures (JVs), and other modes of partnership in building a transportation and logistics hub in every region to encourage countryside investment.
- Address bureaucratic hurdles to reduce trade costs pertinent to logistics by fully implementing the Customs Modernization and Tariff Act (CMTA). Under the law, the Bureau of Customs (BOC) must ensure uninterrupted 24/7 service in the ports, including weekends and must accredit more off-dock container yards and container barge terminals, as part of its decongestion measures. The Land Transport and Franchising Regulatory Board (LTFRB), for its part, will ensure prompt issuance of franchises and permit to operate (PTO) to truck drivers. Lastly, the DTI's issuance of a policy to regulate port and shipping fees for shippers and full container load (FCL) shipments must be fast-tracked.
- Temporarily reduce export threshold for COVID-19-affected economic zone export-oriented industries, as prescribed by the PEZA Board subject to terms and conditions as the latter may determine (RA 7916³⁹).
- Include the establishment of Medical Waste Disposal Facility and production of medical waste disposal equipment among the eligible and priority products/activities for registration with incentives, pursuant to DTI-DOF Joint Memorandum Circular No. 2020-02.
- Rationalize the strict implementation of Department AO 2016-08, which provides additional parameters for monitoring and compliance for wastewater discharge, with Department of Environment and Natural Resources (DENR), to undertake cost-benefit study on the additional environmental parameters.
- Adopt digitalization with the view of harmonizing and streamlining permitting requirements of exporters and importers pursuant to the implementation of the EODB-EGSD Act, as enforced by the Anti-Red Tape Authority (ARTA), and establish an inter-agency committee to strengthen coordination among IPAs, including the establishment of a one-stop shop to respond to all concerns regarding ecozone development, investment requirements, and applicable incentives, among others.

Legislative Agenda

For the rest of the Plan period, the following legislative agenda will be pursued:

Table 9A.2 Legislative Agenda to Expand Economic Opportunities in Industry

LEGISLATIVE AGENDA	RATIONALE
<i>Competitiveness, innovativeness, and resilience increased</i>	
Amendment of the Foreign Investments Act	The current law needs to be updated to attract more foreign investments in manufacturing and other priority sectors. The following amendments are supported: (a) reduce employment threshold from 50 to 15 direct employees and (b) exclude individual practice of profession from coverage of the law and the Foreign Investment Negative List (FINL).

³⁹ The IRR of RA 7916, Section 2i allows that ecozone export enterprises, which have been registered with PEZA to engage in manufacturing, assembling or processing activity, falling within the purview of the Act and resulting in the exportation of 100% of its production, may be allowed a lower percentage of its production for exportation as prescribed by the PEZA Board subject to terms and conditions as the latter may determine.

LEGISLATIVE AGENDA	RATIONALE
Philippine Electric Vehicle (e-vehicle) Industry	This aims to highly promote, encourage, and support e-vehicle production and usage towards adopting an eco-friendly and economical transportation landscape in the country. Support and grant for time-bound and performance-based incentives for the manufacture, assembly, conversion, and sale of hybrid and other fuel-alternative vehicles and the establishment of charging stations, will be pursued in accordance with the provisions under the Corporate Recovery and Tax Incentives Reform Act (CREATE) (see Chapter 15). This is also in support of the public utility vehicle (PUV) modernization program of the government to make the country's public transportation system efficient and environment friendly.
National Quality Infrastructure (NQI) Law	An NQI policy will raise quality consciousness of both suppliers and consumers, as NQI institutions introduce, promote, and maintain a culture of safety and quality of goods produced. The law will integrate and coordinate standardization, metrology, testing analysis, quality management, certification, and accreditation at par with global standards. This will ensure that goods and services emanating from or traded to the country are designed, manufactured, and supplied in a manner that matches the needs, expectations, and requirements of the purchasers and consumers, as well as those of the regulatory authorities in the domestic and export markets.
National Digital Transformation	Given the new normal, structural reforms that cut across multiple sectors need to be put in place to allow a transformational shift to digital modes of conducting work and life. This will require enhancing the foundation of the digital economy through greater investment in ICT infrastructure and connectivity and setting up a sound regulatory environment that promotes digital adoption.
Amendment of the Contractor's License Law ⁴⁰	This will provide a level playing field and expand opportunities to eligible and qualified domestic and foreign contractors by reducing barriers to entry of new players in the construction sector. Moreover, this will facilitate potential investments in quality and climate-resilient infrastructures.
<i>Consumer access to safe and quality goods and services ensured</i>	
Amendment of the Consumer Act ⁴¹	The law needs to be updated to efficiently and effectively address consumer concerns and align existing business and industry practices, to be at par with international standards and best practices, and to cover the use of technology applications (e.g., e-commerce).

⁴⁰ Amendment of the Contractor's License Law (Senate Bill 1008) was filed by Senator Sherwin Gatchalian on September 4, 2019, aimed at removing government restrictions that hinder potential economic growth by removing the nationality criterion and replacing this with foreign reciprocity.

⁴¹ Among the Consumer Act amendments being considered are: (a) stronger measure to give DTI the authority to close down establishments caught in the act of manufacturing, distributing, selling, producing, displaying, or importing hazardous and defective products; (b) coverage on e-commerce and ICT; (c) protection from deceptive and misleading online or digital advertisements; (d) real-time consumer hotline to be made mandatory for all manufacturers/suppliers/final producers to respond to consumer complaints/suggestions and a stronger policy for return and refund options; (e) requirement for foreign products with labels to have English or Filipino translation before being allowed entry into the country; and (f) exemption of businesses offering price-discounted rates for single or bulk-purchase of products or services from the requirement to secure sales promotion permit from DTI to facilitate growth of e-commerce, among others.

9B Expanding Economic Opportunities in Services



Expanding Economic Opportunities in Services

The services sector functions as an integral backbone of a wide range of domestic and global industries and has maintained its position as the main growth driver, top contributor to gross domestic product (GDP), and the biggest employer of the country during the first half of the Plan period.

However, with the sudden halt of major subsectors such as tourism and transport services due to the global pandemic, a shift to more digital-based services may be needed to propel the services sector. With the new normal, the government now has to establish the integration of necessary health and sanitary protocols in daily activities to ensure that the public remains safe in light of the current pandemic. On the other hand, reforms to attract investments, increase competitiveness, and further improve the country's business environment are needed to boost recovery and strengthen the economy's resilience.

Assessment and Challenges

Assessment: Services remained the country's major driver of economic growth for the first half of the Plan period. The share of services to total GDP grew to 60.6 percent in 2019 from 59.6 percent in 2017. During the period, services generated a full-year net employment gain of 1.3 million in 2019 in contrast to the employment loss in 2017. Average growth was the fastest relative to agriculture and industry at 7.2 percent, contributed mainly by wholesale and retail trade, finance, public administration, transportation, real estate, information and communications technology (ICT), as well as accommodation and food services. Tourist arrivals in 2019 reached an all-time high of 8.3 million, marking a 15.2 percent increase from 2018 and hitting the 8.2 million target set for the year. Approved foreign investments recorded in the sector have been increasing, but actual net equity capital investments have been on a downward trend since 2017. Major reforms passed during the period include the Ease of Doing Business and Efficient

Government Service Delivery (EODB-EGSD) Act of 2018 and the 11th Regular Foreign Investment Negative List (RFINL).

With the global economic slowdown brought about by COVID-19 pandemic, the Philippine economy is expected to be in recession in 2020 due to the subsequent deceleration of most domestic economic activities. For the services sector, highly-affected sectors include retail trade, transportation, and tourism-related activities. Reduced employment generated in the services sector is also expected, as the suspension of production activities for both goods and services resulted in business closures with many firms currently facing financial difficulties.

Challenges: The services sector will continue to take a big hit from the COVID-19 pandemic as the global movement of people and goods continues to be limited due to travel bans and other restrictions imposed by countries. On the domestic front,

the imposition of various levels of community quarantines across the country also resulted in the limited movement of people, goods, and delivery of services.

Amidst the debilitating impact on services brought about by the pandemic, digital technologies have provided an opportunity for many businesses to thrive. Business transactions powered by information and communication technology (i.e., electronic trade, banking, and payments) became a necessity under the “new normal.” Now, consumers and merchants face an increased preference/demand for online transactions and alternative modes of shopping. To adjust to this behavioral change, the readiness of the country’s digital infrastructure, as well as the strengthening of digital security and consumer protection, are critical in moving forward during these times.

IT-enabled platforms that allow the financial system to provide secure digital banking and cashless payment systems will be important. For

logistics, bottlenecks in achieving a seamless, uninterrupted supply chain that is efficient and reliable needs to be addressed. Demand for tourism and travel, in general, will still be relatively low until a vaccine is available. For those allowed to travel, immigration controls will be stricter and health checks will be carried out frequently. There is a heightened need for regular sanitation or disinfection of accommodation, public establishments, and transport services, as well as a stable provision of sanitation or disinfecting devices in these areas.

In many service-oriented organizations in the private and public sectors, alternative/flexible-work arrangements (e.g., work from home) need to be widely implemented to conform to strict social distancing protocols. Consequently, enhanced broadband connectivity will be needed to respond to the increased demand. The energy sector also needs to adapt to the change in electricity consumption patterns (*see Chapter 19*).

Targets

For the remaining Plan period, gross value added (GVA) growth rate targets were adjusted based on the new assumptions in the period as recognized and approved by the Development Budget Coordination Committee (DBCC) on July 28, 2020. The revised services targets, as shown in Table 9B.1, considered new

assumptions from internal and external factors affecting the sector. The GVA growth rate in the services sector is projected to expand by 5.8 percent to 6.8 percent and 7.3 percent to 8.3 percent in 2021 and 2022, respectively. In addition, the sector is targeted to create an average net employment of 4.4 to 4.7 million at the end of the Plan period.

Table 9B.1 Updated Plan Targets to Expand Economic Opportunities in Services

INDICATOR	BASELINE VALUE (YEAR)	TARGETS			
		2020	2021	2022	END OF PLAN
Economic opportunities in Services across regions including the digital economy expanded					
GVA growth rate in the services sector improved (%) ^a	8.2 ^b (2016)	6.3-7.3	5.8-6.8	7.3-8.3	7.3-8.3
Employment generated from the services sector increased ('000s) ^c	578 (2015)	499	1,400-1,600	600-700	4,429-4,729

Notes: ^a GVA at constant 2018 prices. Note that revised GVA growth rate for 2021-2022 is in line with the revised DBCC-approved GDP estimates last 28 July 2020.

^b National Income Accounts (NIA) as of August 2020.

^c “Employment generated refers to additional employment generated from the preceding year. Annualized employment generation for 2014 and 2015 refer to the average of estimates for April, July, and October Labor Force Survey (LFS) rounds which excluded data of Leyte province. Further note that revision of target employment generation in services for 2021 and 2022 is consistent with the revision of target total employment generation (see Chapter 4) and revision of labor productivity in services (see Chapter 10) in the same period.”

Strategic Framework

The strategic framework (Figure 9B.1) has been reconfigured to include strategies that respond to the rapid changes under the post-pandemic “new normal” scenario. Expanding economic opportunities and increasing access to these opportunities across regions in the services sector are still the main objectives. These can be

facilitated more effectively by maximizing the potential of the digital economy. Three subsector outcomes are envisioned: (a) market access improved; (b) competitiveness, innovativeness, and resilience increased; and (c) consumer access to safe and quality goods and services ensured.

Figure 9B.1 Strategic Framework to Expand Economic Opportunities in Services



Strategies

For the remaining years of Plan implementation, the following strategies will be implemented to achieve the sector and subsector outcomes as well as targets:

Expanding opportunities in services across regions

Improving market access

Maximize opportunities that expand access to existing and new markets under the Association of Southeast Asian Nations Free Trade Agreements (ASEAN-FTA) and other preferential agreements with key trading partners (see Chapter 15). Intensify efforts in pursuing the Master Plan on ASEAN Connectivity 2025 to support the recovery of intra-ASEAN trade as a regional growth engine.

Expanding access to economic opportunities in services including the digital economy

Increasing competitiveness, innovativeness, and resilience

Improve the business environment.

- **Continue efforts to ease or remove restrictions in the services sector and pursue reforms to open the sector to foreign participation and encourage competition.** Restrictions in telecommunication and transportation services will be given particular attention, including the amendment of the Public Service Act of 1936.
- **Further improve the business environment with the full implementation of the EODB-EGSD Act of 2018 and the Philippine Business Registry (PBR) and the Business Permit Licensing System (BPLS)** to minimize, if not eliminate, redundancies and overlaps in

requirements and reduce transaction costs. In addition, the implementation of the Business One-Stop Shop (BOSS) and the creation of the Central Business Portal (CBP) to streamline procedures will be prioritized. Continuation of “Project Repeal” will also be pushed to further eliminate irrelevant laws and regulations.

- **Prioritize the establishment of clear enforcement rules for sectors/economic activities liberalized under the 11th RFINL**, in line with easing foreign equity restrictions to ensure that existing and new regulations are responsive to the goal of making the country more competitive.
- **Implement the National Competition Policy (NCP)** to enhance the competitiveness of the services sector by ensuring that regulations promote fair competition and level the playing field, particularly in the transportation, energy, and telecommunication sectors (see Chapter 16).
- **Undertake a comprehensive regulatory impact assessment of existing regulations** to ensure that these do not impose unnecessary burden on businesses.
- **Develop sector-specific services trade data, including indices**, to measure the country’s services regulatory environment.

Develop high value-added, competitive, and sustainable sectors.

- **Support the development of high-value services sectors and backbone/supporting industries** to strengthen linkages of the sector into the domestic and global value chains, as well as address agglomeration, economies of scale, and gaps in the supply and value chains. This will also assist companies affected by the pandemic to diversify to more productive and relevant high-value services that can be easily integrated into the global value chain.

- **Facilitate the growth of the Information Technology and Business Process Management (IT-BPM) industry** through improved access to quality ICT infrastructure, affordable power and logistics costs, and an enabling regulatory environment, among others. Alternative working arrangements should be adopted to conform to social distancing protocols.
- **Develop statistics to measure the growing digital economy and creative industries, including digital platforms and online work**, to establish a clear and comprehensive definition, as well as a classification system, for what constitutes a digital economy and activities categorized as creative industries. A clear delineation on the criteria for classifying goods and services that are considered, digital and non-digital should also be formulated.
- **Amend the National Accreditation Standards for all tourism enterprises** to include additional measures related to regular sanitation, disinfection, promotion of proper hygiene, and responsible information sharing.
- **Encourage tourism businesses, especially micro, small, and medium enterprises (MSMEs)**, to craft business continuity plans (BCPs) to take into account resilience to risks and health-related outbreaks, epidemics, and disasters due to natural and human induced hazards.
- **Revisit the Maritime Industry Development Plan (MIDP) 2019-2028 Program 2 on the Development of Shipping Services for Maritime Tourism.** Together with the National Cruise Tourism Development Strategy and Action Plan, the MIDP Program 2 will be reviewed to promote the Philippines as a regional cruise center of Asia through the establishment of design and safety standards for construction and operation of cruise ships, boats, and pleasure craft, facilitation of maritime tourism investments, and promotion of maritime tourism to global travel industry/ cruise tourism market, in line with the new normal.

Accelerate the recovery of the tourism and travel industry.

- **Aggressively pursue new air services agreements** to increase access and connectivity to new markets and potentially benefit the travelling public, tourism industry, and airline carriers, among others.
- **Revisit the National Tourism Development Plan (NTDP) 2016-2022, local tourism plans, as well as the Tourism Industry Training Plan**, to ensure the development and marketing of competitive products and destinations, intensify improvement of market access, connectivity, transport, and infrastructure, and enhance tourism institutional governance and human resources, in line with the new normal. In particular, the enhancement of health and safety protocols in all tourism establishments will be prioritized. Trainings on initial handling of possible infectious disease cases should be given to tourism personnel and a reporting system for suspected cases should be established.
- **Boost tourism from the Middle East and other Muslim-majority countries by supporting the development of the Halal industry and promoting business partnerships with companies from those countries.** Increase the conduct of Halal-related seminars and training via webinars to strengthen the Philippine Halal industry and continue exploring the potential of incorporating Halal in other sectors.
- **Strengthen tourism data collection and management through the institutionalization of the Department of Tourism's (DOT) Local Tourism Statistics System.**

Improve access to technology and innovation.

- **Improve digital skills, ICT infrastructure, and digital connectivity to ensure reliable and affordable broadband and internet services.** This will encourage more businesses and consumers to participate in the digital economy and support the continuous growth of the IT-BPM industry, as well as other IT-enabled industries. Investments in ICT infrastructure need to be boosted to meet the surge of online

transactions and the consumers' expectations for reliable and safe digital connectivity in the new normal.

- ***Develop the country's digital financial infrastructure to ensure the readiness of the financial system to shift towards a cash-lite economy***, following the widespread use of financial technologies (fintech), which have made digital financial services more accessible, available, and affordable for Filipinos. Critical infrastructure needed to support digital payments include the Philippine Identification System (PhilSys) (see Chapter 15), enhanced Real-Time Gross Settlement (RTGS), Digital Banks, Open Banking Platform, and the QR Ph (National Quick Response [QR] Code standard). To support MSMEs, financial infrastructures such as digital supply chain financing, online collateral registry, credit risk database, and credit information and guarantee system, should be established to address fundamental issues that constrain sustained private sector involvement in MSME financing.
- ***Promote digital payments in both government and private sector***. The government will engage key stakeholders in both public and private sectors to broaden the use of digital payment platforms and ensure that these are supported by robust infrastructure and digital governance standards. Among the priorities will be compelling the use of bills payment, receipt of wages, social transfers, payment of government fees, and person-to-merchant and business-to-business (B2B) payments. These will be complemented by the promotion of digital literacy, financial education, and consumer protection policies to build consumer trust.
- ***Pursue the full implementation of the TradeNet to facilitate contactless trade and to expedite the processing of documents*** (see Chapter 15).
- ***Strengthen intellectual property (IP) promotion, protection, regulation, and enforcement*** (see Chapter 14).

Enhance labor capacities in the services sector (see Chapter 11).

- ***Pursue reskilling and upskilling of workers and invest in human capital development based on the transformation of jobs, facilities, processes, and future skills needs***. Update course offerings and training programs to include skills needed to cater to higher value-added services and to diversify labor skill sets to encourage specialization. Skilled trainers must also be readily available to ensure the quick adaptation of the labor force to current and emerging trends. In addition, proactive development of needed manpower, in line with the requirements of industries may be achieved through intensified labor market information.
- ***Address mismatch in industry needs and education/skills*** through strengthened linkages between industry, government, and academe, review of curricula and courses offered in consultation with MSMEs and industries, and conduct a study to address the industry needs and matching of education/skills.
- ***Implement provisions of the Transnational Higher Education Act (Republic Act [RA] 11448)***, which allows foreign higher education institutions to establish a commercial presence or provide educational services in various modes or arrangements with local partner educational institutions. As a response to globalization and the Fourth Industrial Revolution (FIRE), the law aims to modernize and improve the competitiveness of the higher-education sector by bringing international quality standards and expertise into the country.
- ***Intensify benchmarking and comparability of qualifications under the Philippine Qualifications Framework*** by expanding the coverage of the ASEAN Mutual Recognition Arrangements (MRAs) for Tourism professionals, among others. This will enable increased access of more Filipino tourism professionals to tourism-related jobs in ASEAN by establishing Philippine qualifications at par with ASEAN standards.

Strengthen the Philippines' e-commerce industry.

- ***Hasten growth of e-commerce by focusing on building up digital speed, security, and structure to expand the market and increase sales.*** Establish necessary policies, advocacy, awareness campaigns, payment systems, and infrastructure to support its growth.
- ***Incorporate digital trade in the updating of the Philippine ECommerce Roadmap 2016-2020.*** Consider inclusion of digital trade strategies to keep abreast of emerging digital technologies and platforms and changing consumer habits.
- ***Strengthen consumer/producer rights' protection in e-commerce transactions*** by establishing an effective dispute settlement mechanism to govern and streamline processes for the resolution of complaints, which may involve fraud, cyber-crime, payment security issues, and security of websites, among others. Information on the fulfillment of e-commerce transactions and the resolution of transaction complaints will be made available.
- ***Generate official industry data to monitor and measure the contribution of e-commerce and digital trade to the economy.*** Create a centralized and standardized data portal for the e-commerce industry containing relevant statistics such as market segmentation (i.e., mobile e-commerce, food and beverage e-commerce) and type of ownership, among others.
- ***Support entry of new players in the delivery services sector*** and facilitate collaboration of retail and restaurant owners with delivery service providers.
- ***Promote and regulate alternative modes for shopping or retail trade*** through personal assistance services, with draft rules and regulations for these services formulated by the Department of Trade and Industry (DTI), Land Transportation Franchising and Regulatory Board (LTFRB), and Department of

Information and Communications Technology (DICT). Protection of both buyers and those delivering the service must be ensured.

- ***Expand microinsurance products to include non-life business insurance and increase business owners' awareness on insurance.*** Encourage businesses, especially MSMEs, to avail of microinsurance to protect their businesses and investments and to craft BCPs that take into account possibilities of multiple crises, including pandemics.
- ***Establish secure e-payment systems and ensuring consumer protection online.***
- ***Establish and institutionalize a clear and simple digital taxation framework that is efficient and fair.*** Ensure neutrality in tax treatment among different forms of electronic commerce. Administrative costs for tax authorities and compliance cost for taxpayers should be minimal. In addition, the system for taxation should be flexible and dynamic to keep pace with technological and other developments and to align with the country's regulations, as well as with current and emerging international regulations on digital taxation (see Chapter 15).

Upgrade logistics services (see Chapter 19).

- ***Develop ports near export-processing zones*** to provide businesses with the necessary infrastructure to facilitate shipment of goods and services to export markets at a lower cost. This would also decongest Manila ports—lessening shipment delays and lowering overall transportation costs. Immediate promulgation and implementation of regulation on international shipping rates will be critical in addressing high shipping costs. Increased utilization of ports outside Metro Manila (e.g., Batangas and Subic ports), as well as deterrence of smuggling activities, will be crucial in eliminating logistical inefficiencies.
- ***Revisit the Lateral Attrition Act (RA 9335) to include improvement in current customs***

procedures as part of the assessment of performance indicators used by the Bureau of Customs (BOC).

- **Accelerate streamlining of customs procedures** in terms of speed, simplicity, and predictability to avoid congestion in ports. An efficient system of tracking and tracing shipments must be in place using the latest available technology. Investments in warehouses, cold storage facilities, and paperless transaction systems need to be increased.
- **Revisit the management and regulation of ports to improve efficiency of port operations and encourage competition among ports.** The separation of the regulatory and operational functions of port authorities and the subsequent establishment of a single entity for port regulations, may increase the efficiency and competitiveness of ports, by allowing inter-port competition and encouraging more private sector participation (*see Chapter 19*).
- **Pursue efforts towards the full operationalization of the TradeNET in line with the country's commitment to the ASEAN Single Window.**
- **Upgrade the National Logistics Master Plan 2017-2022 to include innovation and strengthen its implementation to improve the efficiency of the national logistics system.** Development and diffusion of smart logistics technology (e.g., drones, automation) are essential to keep abreast of the changing logistics landscape. Use of the Supply Chain Analytics (SCAn) Dashboard and SCAn Reporter, which aim to troubleshoot problems in the supply chain for goods and production inputs and in planning supply chain-related interventions, will be promoted. Fees and regulations imposed by local and national governments will be rationalized to reduce the burden for logistics industry players. Infrastructure upgrades, particularly construction of transport systems connected to logistics hubs, are critical in coping with the increasing demand for logistics services (*see Chapter 19*).
- **Create a competent national body for multimodal transport.** In the interim, close policy coordination, deeper integration, and information sharing towards potential rationalization of functions should be developed by the Department of Transportation (DOTr), Maritime Industry Authority (MARINA), and Land Transport Franchising Regulatory Board (LTFRB), to ensure greater interconnectivity among different modes of transport and land uses. Provision of franchises and permits for multi-modal operations (land, sea, and air) should be automated and streamlined.
- **Review the existing Foreign Ships Co-Loading Act for possible amendments.**
- **Support the adoption of the programs under the MIDP 2019-2028** to accelerate the achievement of nationally-integrated and globally-competitive maritime industry by developing and sustaining an organizational culture and practice of leading maritime education, innovation, technology, and sustainability.
- **Pursue the passage of the Philippine Ship Registration Act,** which will enhance and rationalize the Philippine maritime industry through the establishment of a ship registry system, compliant with international maritime convention regulations and practices. The bill also proposes a shift to tonnage taxation system from 4.5 percent corporate income withholding tax to have an attractive Philippine registry and generate additional revenues for the government, as well as promote Filipino ship ownership instead of mere bareboat chartering.

Ensuring consumer access to safe and quality goods and services

Continue vigilance on product safety, value for money, and access to quality goods and services.

- **Amend the Consumer Act to broaden protection for consumers** (*see Chapter 9A*).

- **Implement and monitor compliance with the Financial Consumer Protection (FCP) Framework by the Bangko Sentral ng Pilipinas Supervised Financial Institutions (BSP-BSFIs).**¹ The FCP Framework recognizes the emerging risks associated with digital financial products and services and provides flexibility for the BSFIs to strategize its consumer protection approach commensurate with its business model, corporate structure, and risk profile. Thus, the enhanced principles-based framework aims to institutionalize consumer protection practices that adopt standards to strengthen fair and responsible treatment of financial consumers, protection of client information, disclosure and transparency of information, provision of effective recourse, and financial education in BSFIs.
- **Promote digital literacy to increase sumercapability and confidence in using digital financial services and e-payments.** With the new economy ushering in greater digitalization of the financial system, an intensified digital literacy program is needed to increase awareness and capacity to use digital financial services, as well as protect consumers from potential risks and threats arising from their usage.
- **Pursue the passage of the FCP Bill,** which aims to provide the regulatory framework for financial services and products offered by financial institutions, including digital financial services, to protect the interest of financial consumers and invigorate confidence in the financial markets. This measure also seeks to enhance the supervisory powers of financial regulators to include adjudicatory powers over consumer concerns, affording stronger redress mechanisms for financial consumers. The FCP Bill will amend the Consumer Act of the Philippines (RA 7394) and carve out from the same, the provisions of Title IV (Consumer Credit Transaction) and have in place a standalone statute governing FCP. The bill is a result of collaboration among members of the Financial Sector Forum, namely, the Securities and Exchange Commission (SEC), Insurance Commission (IC), Philippine Deposit Insurance Corporation (PDIC), and BSP.²

Promote consumer protection.

- **Strictly enforce standards and regulations to protect and empower consumers against unfair trade practices and fraudulent schemes.** Intensify market monitoring of product standards across the region to ensure consumer protection.
- **Encourage financial institutions to implement better cybersecurity measures and regulations for online transactions.**
- **Promote awareness on insurance policies through various information and education campaigns.**
- **Establish an easy-access business verifier containing an online database of duly registered businesses with valid licenses to operate.**

¹ BSP, Circular No. 1048, Series of 2019, *BSP Regulations on FCP; Guidelines and Procedures Governing the Consumer Assistance and Management System of BSFI; and Amendments to the Manual of Regulations for Banks and Non-Bank Financial Institutions*, September 6, 2019.

² In the House of Representatives, the Financial Products and Services Consumer Protection Act was passed on Third Reading June 2, 2020, and Engrossed Bill (House Bill [HB] 6768) was transmitted to Senate on June 3, 2020.

Legislative Agenda

For the rest of the Plan period, the following legislative agenda will be pursued:

Table 9B.2 Legislative Agenda to Expand Economic Opportunities in Services

LEGISLATIVE AGENDA	RATIONALE
Public Service Act	Proposed amendments in the bill will include the definition of public utility, which limits its scope to only three main industries, distribution of electricity, transmission of electricity, and water pipeline distribution system or sewerage pipeline system. This will enable higher foreign equity participation (over 40%) in other key areas such as telecommunication and transportation services. Other notable proposed amendments are on the increase in the applicable penalties and fines to deter poor service delivery, the introduction of rate-setting methodologies to promote efficiency, a mechanism to review and prohibit foreign investment in public services in the interest of national security, and a comprehensive baseline survey on regulatory governance and substance.
Retail Trade Act	Proposed amendments to the Law relevant to the services sector will reflect the relaxation of barriers to foreign investments in the retail sector through lowering the minimum paid-up capital to USD200,000 from USD2.5 million and removing the USD250,000 paid-up capital per store for enterprises engaged in high-end or luxury products, among others.
Foreign Investments Act	Proposed amendments in the Act aim to reduce the minimum employment requirement from 50 to 15 direct local hires for small- and medium-sized domestic enterprises established by foreign investors with paid-in capital of at least USD100,000. It will also exclude the practice of professions from the coverage of the foreign investment negative list.
Open Access in Data Transmission Act	This initiative aims to level the playing field in the data transmission and telecommunications market. Its passage will strengthen the value chain linkages in the industry and services sectors and facilitate the realization of the full potential of e-commerce and digital trade.
E-Commerce Act of 2000	The law will be revisited to make it more comprehensive in detailing e-commerce transactions, specifying the rights of consumers, strengthening the imposition of penalties on service providers, and requiring service providers to provide high-security measures to ensure safety from possible breaches on data processing and money handling.
Internet Transactions Act	The Law defines the scope and coverage of internet transactions, apart from the sale or exchange of digital products, and lays down the code of conduct and qualifications for businesses who wish to engage in e-commerce. It also proposes the creation of an E-commerce Bureau to handle complaints on internet transactions, protect consumers' rights, and facilitate the speedy resolution of complaints, among others.
National Digital Careers Act	This measure seeks to establish a legal framework for the "gig economy" that will map out strategies to promote and strengthen digital careers, as well as provide the needed institutional support. Also, it recognizes the emergence of new forms of employment, such as work on digital platforms, and requires the government to extend the social protection system appropriate to this new mode of work, especially in times of economic downturns caused by calamities and public emergencies.
Fair and Transparent Destination and Other Shipping Charges Act	The Act mandates the MARINA to promote standardized destination and shipping charges among freight forwarders and agents of international shipping lines operating in the Philippines. This will also mandate DTI, Philippine Competition Commission (PCC), BOC, Bureau of Internal Revenue (BIR), and other relevant agencies to assist the MARINA in facilitating competition, commerce, and an honest revenue system, among others.

9C Expanding Access to Economic Opportunities in I&S for Startups, MSMEs, and Cooperatives



Expanding Access to Economic Opportunities in I&S for Startups, MSMEs, and Cooperatives

Critical policy reforms¹ have been introduced in recent years to assist startups, micro, small, and medium enterprises (MSMEs), and cooperatives in gaining access to finance and production networks, as well as enhance their productivity, efficiency, and resiliency.

However, full implementation has been impeded by the unprecedented spread of COVID-19. Based on the government's rapid assessment survey for businesses conducted during the initial phase of the community quarantines in major urban areas of the country, a less optimistic business outlook is reported across firms of different sizes, with the most pessimistic in the education (36%), tourism (35%), and transport (34%) sectors. This is likely in recognition of the fact that business operations would have to be reconfigured and social distancing protocols will remain in place indefinitely until a cure is found. Smaller enterprises have expressed a strong clamor for government assistance given that they have less capacity to handle large shocks with their limited asset size, lack of economies of scale, and structural inefficiencies, evident even prior to the onslaught of the pandemic. In response, the government has formulated urgent interventions to revive consumer and business confidence.² Focusing on laying down a healthy and resilient Philippines, the medium-term strategies will leverage the digital economy and put in place antifragility measures. This will address the constraints of operating under the new normal, attract further investments, and increase the resilience of startups, MSMEs, and cooperatives.

Assessment and Challenges

Assessment: The legal framework essential for startups, MSMEs, and cooperatives to access finance and production networks and strengthen the startup ecosystem was institutionalized.

Among the significant legislations passed were, Ease of Doing Business and Efficient Government Service Delivery (EODB-EGSD) Act of 2018, Personal Property Security Act (PPSA) of 2018,

¹ These include the enactment of the following legislations: Personal Property Security Act of 2018 (Republic Act [RA] 11057), Amendment of the Cooperative Development Authority (CDA) (RA 11364), Revised Corporation Code of the Philippines Act of 2019 (RA 11232), Philippine Innovative Startup Act of 2019 (RA 11337), and Philippine Innovation Act of 2019 (RA 11293).

² Inter-Agency Task Force for the Management of Emerging Infectious Diseases – Technical Working Group for Anticipatory and Forward Planning (IATF-EID-TWG-AFP), We Recover As One (WRAO), National Economic and Development Authority (NEDA), 2020.

Amended Cooperative Development Authority (CDA) Charter of 2019, Revised Corporation Code of the Philippines Act of 2019, Philippine Innovative Startup Act of 2019, and Philippine Innovation Act of 2019. Meanwhile, these reforms have yet to gain traction as industry-related foreign direct investments (FDIs) significantly dropped in 2019, reaching only USD0.27 billion in 2019, lower relative to the figure posted in 2016 at USD0.31 billion.

Challenges: Startups, MSMEs, and cooperatives have difficulty accessing finance due to lack of collateral and inability to comply with documentary loan requirements of formal lending institutions, exacerbated by the lack of a credit risk database with information

on the creditworthiness of micro and small enterprises. Innovation and technology adoption of enterprises remains low, and seed funds and grants available to support incubation and startup development remain scarce while venture capitalists are still limited. As further revealed by the current pandemic, the majority of micro and small enterprises are entrenched in the analog manner of conducting business and do not have business continuity plans (BCPs) in place in the face of national emergencies. The majority also have business operations that are vulnerable to supply chain disruptions. Government initiatives to enhance sectoral productivity remain fragmented. Lastly, foreign participation is restricted in critical sectors, thus, limiting competition and investment flow in the country.

Targets

Targets for investments and MSME-related indicators were adjusted downward considering new assumptions in the period, consistent with the Development Budget Coordination Committee (DBCC) revised growth targets last July 2020.

Table 9C.1 Updated Plan Targets to Expand Economic Opportunities in I&S for Startups, MSMEs, and Cooperatives

INDICATOR	BASELINE VALUE (YEAR)	TARGETS			
		2020	2021	2022	END OF PLAN
Total investments increased					
Total approved investments increased (PHP million) ^a	729,000 ^f (2016)	1,067,000	1,022,000	1,094,000	5,837,000
Net FDI increased (USD million) ^b	8,280 (2016)	None	None	None	None
Access to finance improved					
Percent of allocation for micro and small enterprises to total bank loan portfolio (%) ^c	3.81 ^d (2016)	8 ^e	Increased ^{c,e}	Increased ^{c,e}	Increased ^{d,e}
Percent of allocation for medium enterprises (%) ^c	5.44 ^d (2016)	2 ^e	Increased ^{c,e}	Increased ^{c,e}	Increased ^{d,e}

^a Baseline figure used to compute the plan targets reflects total approved investments submitted by investment promotion agencies to the Board of Investments (BOI) and the Philippine Statistics Authority (PSA). Members of the Philippine Investment Promotion Plan (PIPP) Steering Committee approved the downward revised target of 7 percent annual increase in Investment Promotion Agencies (IPA)-approved investments (from the original 10%) for 2021 and 2022, considering the DBCC

revised growth forecasts due to the COVID-19 pandemic.

^b While there were no targets set, the indicator was included in the RM for monitoring purposes. Net foreign direct investment for 2016 was recorded at USD 8.28 billion. Gross domestic product (GDP) in current prices for the same year was recorded at USD 318.6 billion.

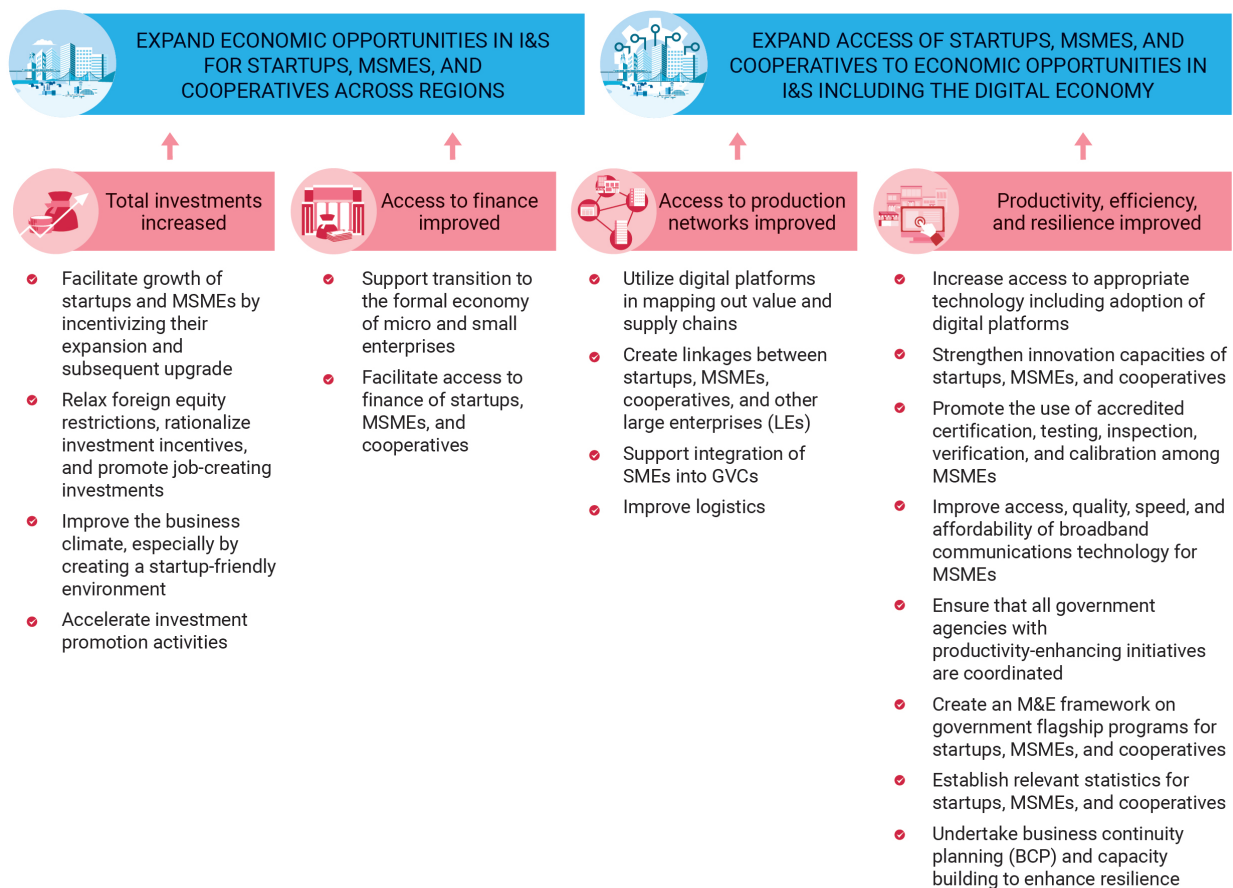
^c In accordance with the Magna Carta for MSMEs (RA 6977 as amended by RA 8289 and RA 9501). Used as proxy indicator for “Proportion of small scale industries with loan or line of credit” (Sustainable Development Goals [SDG] indicator 9.3.2 [Tier 3]) to measure improvement of access to finance. The Planning Committee on Economic Development and the Plan Steering Committee (PSC) approved revision of targets last March 2020 (pre-pandemic) to “increased” given that the 10-year mandatory credit allocation for MSMEs has already lapsed in June 2018, as stipulated under the law.

^d Baseline updated as of March 31, 2017.

^e Relative to actual accomplishment of the previous year.

Strategic Framework

Figure 9C.1 Strategic Framework to Expand Economic Opportunities in I&S for Startups, MSMEs, and Cooperatives



Strategies

Expanding economic opportunities in I&S for startups, MSMEs, and cooperatives across regions

Increasing total investments

Facilitate growth of startups and MSMEs by incentivizing their expansion and subsequent upgrade. In restructuring the incentives (and disincentives) in the regulatory framework, facilitating the growth of MSMEs to eventually become globally competitive will be a key goal. Policy shifts will take into account the following:

- Provide appropriate fiscal and non-fiscal assistance to innovative and growth-oriented enterprises (e.g., tech-based startups and micro and small enterprises that are innovation-driven, etc.) appropriate with the stage of business operations;
- Ensure that provision of grants and other financial or technical assistance, are time-bound and performance-based, as provided under the Corporate Recovery and Tax Incentives Reform Act (CREATE); and
- Streamline the regulatory environment to reduce compliance costs for all firms.

Relax foreign equity restrictions, rationalize investment incentives, and promote job-creating investments. The government will further open up the construction sector and pursue the amendments to the Public Service Act,

Retail Trade Liberalization Act (RTLTA), and Foreign Investments Act (FIA) (*see Chapters 9A and 9B*). Investment incentives will be rationalized to be more efficient and effective in supporting development priorities (e.g., encourage more venture capital and angel investments in startups) (*see Chapter 15*). Such priorities will be considered in the formulation of the Strategic Investment Priority Plan (SIPP), as well as in the Local Investment and Incentives Code (LIIC).³

Improve the business climate, especially by creating a startup-friendly environment. The government will enhance business incubation support and accelerate services for startups, lessen administrative burdens and complexity of regulatory procedures for startups, and reduce, if not eliminate, the regulatory protection of incumbents (*see Chapter 16*). Further, national and local governments will speed up streamlining of agency processes and requirements for business registrations and permit issuances⁴ and will be streamlined through digital platforms (*see also Chapters 5 and 9A*). A one-stop-shop for startups and a startup green lane with Anti-Red Tape Authority (ARTA) will be created. In addition, the Philippine Startup Development Program (PSDP) will support incubators, accelerators, and makerspaces by creating opportunities for innovative startups to gain access to marketing and technical support as well as linkage to potential collaborators locally and globally (*see Chapter 14*). A whole-of-nation approach in attaining inclusive and sustainable peace will also be pursued (*see also Chapter 18*). Lastly, improving quality and reducing the cost of utilities, particularly through energy and water sector reforms (*see Chapters 9A and 19*) will be implemented.

³ DILG and DTI Joint Memorandum Circular No. 2011-01 forms a guide in crafting the LIIC.

⁴ The Central Business Portal (CBP) and the National Business One-Stop Shop (NBOSS) were established to support the implementation of the EODB Act. The CBP is an online system aimed at providing a faster and more convenient way of registering businesses and completing startup requirements. It is designed to receive and capture data on business-related transactions and provide links to online registration services of various National Government Agencies (NGAs). The NBOSS is the physical co-location where applicants can register their business and employees, submit documents, and avail of its online services. In the same manner, the Electronic Business Process Licensing System (eBPLS) is being rolled out to the LGUs nationwide.

Accelerate investment promotion activities. The Philippines will be promoted as a complementary host country to target companies in the manufacturing industry. The conversion and realization of existing investment leads will be intensified. The retention and expansion/diversification opportunities for current locators in the Philippines will also be pursued (*see Chapter 9A*).

Improving access to finance

Support transition to the formal economy of micro and small enterprises.

- **Streamline local government unit (LGU) processes and requirements for registration and securing business permits of barangay micro business enterprises (BMBEs) targeting informal sector operators.** Streamlining LGU processes for BMBE registration and business permits⁵ will facilitate the transition of micro and small enterprises to the formal economy and will broaden their access to tap formal financing channels. Instituting a report and feedback system on the LGUs' non-compliance in these areas can be considered under the Department of the Interior and Local Government (DILG) or the ARTA's monitoring as part of efforts to improve the LGUs business environment (*see also Chapter 16*).

Facilitate access to finance of startups, MSMEs, and cooperatives.

- **Improve access to finance of innovative and growth-oriented enterprises.** In line with the

Philippine Innovation Act, the government will provide technical assistance grants and facilitate access to finance. Appropriate metrics will be established to ensure that these enterprises, as beneficiaries of government support, indeed boost innovation and generate decent jobs. Access to low-cost financing will also be provided to competitive and export-oriented MSMEs, if merited under the CREATE/Strategic Investment Priorities Plan (SIPP) framework.⁶ Blended finance or the strategic use of development finance to mobilize funding for projects with societal benefits, but also provide financial returns to the investor will also be tapped.

- **Promote the development of financial technology (fintech) and innovative financing alternatives.** Access to mobile and digital technology, as well as deepening digital fluency will be improved to help further social equity and financial inclusion of MSMEs.⁷ Other non-traditional initiatives from the private sector and startups to develop appropriate financial products and services for MSMEs and cooperatives will also be supported (*see Chapter 9A*). Initiatives such as merchant acceptance of digital payments, digital banks, and open banking will be pursued, to promote access to and use of digital financial transactions⁸ (*see Chapter 9B*). Government will also facilitate access of startups to venture financing and angel investors (*see also Chapter 14*).

In line with the PPSA,⁹ a system for the use of movable collateral as security for loans will be put in place. The CDA with the Bangko

⁵ For instance, streamlining can be done by setting more reasonable standard business permit fees for micro and small enterprises and granting leniency, particularly to informal sector operators who will register for the first time.

⁶ The Philippine Innovation Act of 2018, RA 11293.

⁷ Provision of branchless banking services with access to savings and loans through the use of mobile phones and information technology (IT) facilities are instances of fintech startups revolutionizing the way small enterprises and cash-strapped households access finance.

⁸ These initiatives are under the Bangko Sentral ng Pilipinas' (BSP) Digital Payments Transformation Roadmap (DPTR) 2020-2023. The DPTR is a 3-year roadmap that outlining the BSP's priority policy initiatives and strategies in advancing an efficient, inclusive, safe, and secure digital finance ecosystem that supports the diverse needs and capabilities of individuals and firms. The roadmap envisions to achieve the goal of converting 50 percent of the total volume of retail payments into digital form and onboarding 70 percent of Filipino adults to the formal financial system.

⁹ Under the PPSA of 2018 (RA 11057), small businesses, particularly MSMEs, farmers, and fisherfolk are granted greater access to credit by allowing the use of non-traditional collaterals such as accounts receivables, inventory, crops, livestock, consumer goods, machinery, equipment, and intellectual property rights, among others. This will be operationalized through the establishment of a unified and modern legal framework for securing obligations with personal property. Under the law, a registry shall be established and administered by the Land Registration Authority (LRA). The centralized, nationwide Registry shall contain the following information: initial notice of security interest and lien in personal property; amendment notice providing new information or continuing the period of effectiveness of an initial notice; and termination notice.

Central ng Pilipinas (BSP) will promote the establishment of Credit Surety Funds (CSFs) across local governments to enable more MSMEs, particularly those hit hard by the pandemic, to gain access to finance¹⁰ (see Chapter 15).

- **Promote value chain and supply chain financing.** The BSP, in partnership with the Asian Development Bank (ADB), is implementing a pilot agriculture value chain financing (AVCF) project,¹¹ which aims to demonstrate the viability of AVCF and encourage more banks to lend to the agriculture sector using this approach. This initiative will also benefit MSMEs, particularly agri-oriented ones. The BSP also aims to promote supply chain financing (SCF) in the banking sector as an innovative financing approach to improve access to financing of smaller enterprises. A study will be conducted in 2021 to identify strategic interventions that can be implemented by BSP and other players, to develop a dynamic SCF market in the country.
- **Extend grants and soft loans to startups, MSMEs, and cooperatives to sustain business operations.** On top of providing a loan guarantee fund, existing government programs targeting MSMEs will continue to be implemented and monitored.¹²
- **Establish an Enterprise Rehabilitation Fund (ERF) and implement adjustment measures to startups, MSMEs, and cooperatives severely affected by calamities and national emergencies.** The proposed establishment of an ERF is one of the suggested revisions on the proposed Amendments to the Magna

Carta for MSMEs (see Chapter 9C Legislative Agenda) and is suggested as part of Small Business (SB) Corporation's capitalization to be funded by the national government. Ongoing debt relief programs are being implemented, including suspension of imposition of non-interest fees and charges on loans incurred. In the post-community quarantine period, the following interventions will be monitored and extended if needed: (a) payment deferment to government (e.g., deferment of tax remittance such as withholding tax, value added tax [VAT], Social Security System [SSS], Philippine Health Insurance Corporation [PhilHealth]); (b) payment deferment to debtor (e.g., rent, banks, utility companies); (c) tax discounts or tax credits; (d) low-interest loans from government; and (e) low-interest loans from banks.

Expanding access of startups, MSMEs, and cooperatives to economic opportunities in I&S including the digital economy

Improving access to production networks

Utilize digital platforms in mapping out value and supply chains to find alternative suppliers and address production bottlenecks. In providing technical assistance to enterprises, digital platforms will be useful in linking farmers, producers, suppliers, distributors, and retailers to consumers. This will further reduce information asymmetry, lower transaction costs, and enhance domestic value and supply chain resilience. Integration of all

¹⁰ As part of expanding its developmental function, the CDA has created a CSF unit that will register, regulate, and regularly monitor and supervise the operations of CSF cooperatives. This is expected to translate to growth of CSF Cooperatives.

¹¹ Pilot is implemented with five participating banks including: (1) Rizal Microbank; (2) Rural Bank of San Leonardo; (3) Rural Bank of Sta. Catalina; (4) 1st Valley Bank; and (5) Producers Bank.

¹² Sufficient government support for MSME financing, to be funded under the General Appropriations Act (GAA) or relevant legislation, will be considered in all forms of economic stimulus programs. This is essential to help the MSME sector to recover from the adverse effects of the pandemic. Some of these programs which target micro and small enterprises are: (a) Livelihood Seeding Program – *Negosyo sa Barangay*; (b) Shared Service Facilities Project/Fabrication Laboratories; (c) *Pondo sa Pagbabago at Pag-asenso* Program; (d) SB Corporation Financing Programs; and (e) *Go Lokal!*.

relevant existing geographic information system (GIS) platforms of relevant agencies will also be pursued (*see Chapter 9A*).

Create linkages between startups, MSMEs, cooperatives, and other large enterprises (LEs) to spur innovation and create new markets. Social enterprises and inclusive business (IB) models will be promoted. The government will also facilitate linking micro and small suppliers to cooperatives for purposes of facilitating access to finance, and to medium and large enterprises to access/diversify markets and enhance supply chain resilience, leveraging digital platforms, as appropriate.

Support integration of small and medium-sized enterprises (SMEs) into global value chains (GVC). SMEs will be capacitated to address their internal limitations¹³ and unlock their potential to internationalize.¹⁴ Support will be provided to enhance capacities of exporters in sectors where the country has significant comparative advantage¹⁵ through technical support.^{16,17} The government will also scale up efforts to facilitate access of exporting SMEs to information on foreign distribution networks and foreign regulations, enhance access to business and trade finance, streamline customs procedures, and further address logistics costs, and reduce tariffs (*see box article 9A.1, Chapters 9B and 15*).

Improve logistics (*see Chapter 9B*).

Improving productivity, efficiency, and resilience

Increase access to appropriate technology including adoption of digital platforms.

Adoption of appropriate technologies will enable startups and MSMEs to gain access to markets and help them internationalize. For cooperatives, deploying digital platforms will increase their client base and improve efficiency of their operations. Consistent with its initiatives to promote and implement the e-commerce roadmap, the government, through the Regional Inclusive Innovation Centers (RIIC), will assist enterprises in adopting applicable digital platforms and digital payment channels (*see Chapter 9B*). The government will provide appropriate support through training programs that will help MSMEs and cooperatives adapt to new digital technologies and platforms, as relevant to their needs (*see Chapter 9A*).

Strengthen innovation capacities of startups, MSMEs, and cooperatives.

A Philippine Institute for Development Studies' (PIDS) 2015 Survey on Innovation Activities (SIA) pointed out that large firms tend to be more innovation active than smaller enterprises, and rarely tap technical assistance from government research institutions.¹⁸ As part of implementing the Philippine i3s, the RIICs will disseminate available information on local or foreign-developed technologies for adoption, whichever is more cost-effective. The RIICs will also allow local enterprises to tap the research arms of state universities and colleges (SUCs) and research development institutions (RDIs) and network with industry experts to enhance their entrepreneurial knowledge and enable them to be Industry 4.0-ready. Further, Intellectual Property Office of

¹³ Lack of internal capabilities include difficulty in identifying foreign business opportunities, inadequate human resource trained to deal with exporting, and lack of production capacity. These are some of the most challenging for SMEs to overcome.

¹⁴ Internationalization activities can be classified into six categories: (a) direct exporting; (b) direct importing; (c) investment abroad; (d) being subcontractors to foreign enterprises; (e) having foreign subcontractors; and (f) cooperation with foreign enterprises under joint ventures, non-equity alliances, licensing, and franchising.

¹⁵ For instance, to induce the local construction industry to globalize, construction firms who are ready to tap global and regional opportunities will need low-cost financing or loan guarantees to undertake overseas construction projects.

¹⁶ Technical support can also be provided through capacity-building programs. For instance, local auto parts and electronics suppliers need capacity building to comply with the technical requirements of domestic e-vehicles, special purpose vehicle (SPV) producers, and other producers under the aerospace industry. In particular, the AS9100 Training Program (Aerospace Quality Management System) will enable local auto parts and electronics suppliers to supply the technical requirements of the aerospace industry.

¹⁷ Assistance can also be extended in the ship-building industry by promoting the use of fiberglass-reinforced plastics (FRP) or steel to replace wooden-hulled vessels.

¹⁸ Jose Ramon G. Albert, et al, "Measuring and Examining Innovation in Philippine Business and Industry," *Discussion Paper Series No. 2017-28*, Philippine Institute for Development Studies, September 2017.

the Philippines' (IPOP HL) Intellectual Property (IP) Depot, an online portal where technology providers and their counterpart technology adaptors may meet and match, will also be promoted to target growth-oriented startups, enterprises, and cooperatives.

Promote the use of accredited certification, testing, inspection, verification, and calibration among MSMEs to ensure safety, reliability, and quality of their products and services (see Chapter 9A). While more dispersed access points will be provided for these common service facilities especially in the regions, efforts to promote these available services will be scaled-up, targeting MSMEs to enhance their productivity. The Department of Science and Technology (DOST) primarily provides these services through the One-stop Laboratory Services for Global Competitiveness (OneLab),¹⁹ a network of laboratories aimed at broadening access to testing and calibration services at a single touchpoint through an information technology (IT)-based platform. The online referral platform system networks all the laboratories of DOST-Attached Agencies and other government and private laboratories for seamless handling of testing and calibration services, which are beneficial for MSMEs, in terms of ensuring product quality and safety.

Improve access, quality, speed, and affordability of broadband communications technology for MSMEs. Improving telecommunications services in the country offers a myriad of benefits for MSMEs including improving business efficiency, opening up new markets, and helping enterprises adapt to changes in consumer preference brought about by the pandemic (see Chapters 9B and 19).

Ensure that all government agencies with productivity-enhancing initiatives are coordinated. Close coordination of relevant agencies concerned with enhancing productivity, efficiency, and resiliency of startups, MSMEs, and cooperatives will be pursued. The National Wages and Productivity Commission (NWPC) and its Regional Tripartite Wages and Productivity Boards (RTWPB) will strengthen and expand partnerships with concerned government agencies, industry associations, employer groups, and labor groups to foster synergy in the deployment of the Productivity Toolbox²⁰ (see Chapter 10).

Create an monitoring and evaluation (M&E) framework on government flagship programs for startups, MSMEs, and cooperatives. Given the presence of various but fragmented initiatives to assist micro and small enterprises, the effectiveness of various government flagship programs will be evaluated based on how they contribute to MSME development. For cooperatives, quantifying their economic contribution to both national and regional development will allow them to gain greater support and assistance. For startups, an M&E framework will be considered in the implementation of the PSDP targeting growth of innovative and tech-based startups.

Establish relevant statistics for startups, MSMEs, and cooperatives. Regular collection and publication of relevant statistics on startups, MSMEs,²¹ and cooperatives will be pursued. This will facilitate the performance tracking of these sectors and become the basis for evidence-based and targeted interventions. Data collection on the following areas will help surface specific barriers and unlock SMEs potential to internationalize: (a) comprehensive data by enterprise size; (b) information on overall business environment and barriers to trade as experienced by SMEs; and (c)

¹⁹ For interested MSMEs, the OneLab website can be accessed through: <https://customer.onelab.ph/>

²⁰ This package of training and technical assistance services is designed to help MSMEs identify and address productivity gaps through appropriate and needs-based productivity tools and technologies. It also helps MSMEs design and implement productivity-based incentive schemes to ensure growth in workers' income commensurate to their productivity.

²¹ The DICT is working with the PIDS on an upcoming survey on the IT Business Process Management (BPM) sector (FY 2020) that shall yield data on MSMEs in the sector.

information and monitoring on targeted policies, best practices, and capacity-building programs for exporting SMEs or those ready to enter into GVCs.²² As part of establishing comprehensive MSME financial statistics, the BSP, in partnership with the ADB, is exploring the design and conduct of the MSME survey to generate more granular data on MSME access to finance. The results of this survey will provide deeper market insight for financial service providers to help them market their products and services.

Undertake BCP and capacity-building to enhance resilience. The adoption of BCPs will be promoted and encouraged to help startups, MSMEs, and cooperatives to prepare for and overcome potential risks to business. Towards enhancing resilience of cooperatives, the Amended CDA Charter (Republic Act [RA] 11364) requires all registered cooperatives to develop BCPs to address all types of business risks. In a similar manner, capacity-building measures will be provided, targeting startups and MSMEs.

Legislative Agenda

For the rest of the Plan period, the following legislative agenda will be pursued:

Table 9C.2 Legislative Agenda to Expand Economic Opportunities in I&S for Startups, MSMEs, and Cooperatives

LEGISLATIVE AGENDA	RATIONALE
<i>Expanding economic opportunities in I&S for startups, MSMEs, and cooperatives across regions</i>	
Amendment of the Magna Carta for MSMEs	The bill will establish an Enterprise Rehabilitation Fund for calamity-stricken MSMEs. It will also provide MSMEs with free selling space in government buildings, structures, and open areas, as well as free selling areas or discounted rent in private malls and other commercial selling establishments.
Government Financial Institutions Unified Initiatives to Distressed Enterprises for Economic Recovery (GUIDE) Bill	The bill will provide financial assistance to firms that are strategically important to economic recovery in view of their role in providing employment and supporting the Philippine economy.
Institutionalization of the <i>Pondo sa Pagbabago at Pag-asenso</i> (P3) Program	This initiative aims to institutionalize the P3 Program of the government to develop entrepreneurship and contribute to inclusive economic growth and provide accessible and reasonably-priced financing to micro entrepreneurs to help them avoid usurious rates.

²² Tammy L. Hredzak, *Overview of the SME Sector in the Asia-Pacific Economic Cooperation (APEC) Region: Key Issues on Market Access and Internationalization*, APEC Policy Support Unit, April 2020.

LEGISLATIVE AGENDA	RATIONALE
Amendment of the Tax Incentives Management and Transparency Act (TIMTA)	The bill seeks to amend existing provision requiring/mandating various registered business entities (RBEs) and investment promotion agencies (IPAs) to submit to NEDA relevant information needed to conduct economic cost-benefit analysis (CBA) and to have the flexibility to refine scope of data requirement and data tools that will adequately capture information relevant to the conduct of this CBA.
<i>Expanding access of startups, MSMEs, and cooperatives to economic opportunities in I&S including the digital economy</i>	
Amendments to the IP Code	<i>(see Chapter 14 Legislative Agenda)</i>
Amendment to the Warehouse Receipts Law	House Bill No. 4413 proposes to establish a central online Registry for all Warehouse Receipts, which shall be eventually integrated with other existing registries. This will strengthen and modernize the Warehouse Receipts Law of 1912, as amended, otherwise known as Act No. 2137.

Human Capital Development Towards Greater Agility

The country is on the right track in accelerating human capital development by prioritizing reforms and investments in improving nutrition and health, education, and income-earning ability. Major reforms in expanding access to nutrition health and transformative education were instituted in the past three years. The Universal Health Care (UHC) Law was enacted to ensure that care for all Filipinos at all life stages is guaranteed. Implementation of the Kinder (K) to 12 Program and the Universal Access to Quality Tertiary Education Law will also enable Filipinos to continuously develop their skills towards achieving their full potential as productive members of a rapidly changing society.

In 2020, the Philippines' score in the World Bank (WB) Human Capital Index (HCI) Update report is 0.52. This was higher than the average among countries in the lower middle-income group, which means that a child born in the Philippines today will likely reach only 52 percent of his or her potential come adulthood. With the COVID-19 pandemic, risks and challenges in enriching human capital have become even more significant.

For the rest of the Plan period, the government will focus on addressing challenges that hamper the full realization of Filipinos' full potential, such as malnutrition, early pregnancy, and poor quality of education, in addition to disruptions in service delivery due to the COVID-19 pandemic. Efforts will focus on strengthening strategies that transform the country's human capital towards greater agility, for a healthy and resilient Philippines.

Assessment and Challenges

Nutrition and health

Outcomes on nutrition and health were based on several data sources. Some progress has been made, considering that the most recent data fell below target.

Mortality among infants, based on the National Demographic and Health Survey (NDHS), slightly decreased from 23 per 1,000 live births (LB) in 2013 to 21 per 1,000 LB in 2017. Mortality in children under five years of age declined significantly from 31 per 1,000 LB to 27 per 1,000 LB over the same period.¹

¹ Philippine Statistics Authority (PSA), 2017 NDHS, PSA, October 2018.

There were significant reductions observed in the prevalence rate of stunting across age groups, but not in the prevalence rate of wasting. For the under five years of age, prevalence of stunting fell from 33.4 percent in 2015 to 28.8 percent in 2019; prevalence of wasting did not show a significant decline, from 7.1 percent to 5.8 percent over the same period. Both figures in 2019 did not meet the Philippine Development Plan (PDP) targets. Note that there were no targets set for the prevalence of stunting and wasting for the older age groups.

There were varying degrees of success with respect to addressing the triple burden of diseases.² There was a decrease in mortality rate attributed to lifestyle-related diseases, from 462.5 deaths per 100,000 population (aged 30–70 years old) in 2016 to 453.8 deaths per 100,000 population (aged 30–70 years old) in 2018. However, there was an increase in reported cases of human immunodeficiency virus/acquired immunodeficiency syndrome (HIV-AIDS), from 9,624 newly diagnosed cases in 2016 reaching 12,778 in 2019. Incidence of Tuberculosis (TB) also increased from 434 per 100,000 population in 2016 to 554 per 100,000 population in 2018.³ The increase in TB incidence may be explained by a combination of case-detection gaps, delays in diagnosis, health system weaknesses, and broader

social and economic influences on the TB epidemic.⁴ Also, the increase in TB notification rate of cases arose from active case finding and mandatory notification of cases by private physicians.

Meanwhile, there was remarkable progress in eliminating malaria cases. The percent of malaria-free provinces went up from 40 percent in 2016 to 62 percent in 2018. This brings us on track to eliminate the disease by 2030.⁵

Using the revised National Health Accounts, the household out-of-pocket spending on health as percentage of total health expenditure has declined from 45 percent in 2016 to 42 percent in 2019. This may be due to the following health programs: (a) No Balance Billing (NBB) Policy for indigent patients; (b) new and enhanced Philippine Health Insurance Corporation (PhilHealth) benefit packages (e.g., Z benefit packages for children with disabilities, expanded primary care benefits, and newborn care package); and (c) Department of Social Welfare and Development's (DSWD) *Libreng Gamot Para sa Masa (Lingap ng Masa)* that provides medical assistance fund to indigent patients. Also, faster increase in health spending of government (11.5%) compared to household (7.9%) was observed from 2016 to 2019.⁶

² Communicable, non-communicable, and urbanization- and industrialization-related diseases.

³ World Health Organization, Philippines: Tuberculosis country profile 2017.

⁴ Department of Health (DOH), *National TB Prevalence Survey*, DOH, 2018.

⁵ DOH, "Malaria Control and Elimination Program," DOH Website, October 26, 2018.

⁶ Average annual growth rate from 2016 to 2019.

Table 10.1 Core Health and Nutrition Outcome Indicators: Targets vs Accomplishments

INDICATORS	BASELINE VALUE (YEAR)	ACCOMPLISHMENT (YEAR)	TARGET (YEAR)
Infant mortality rate decreased (per 1,000 LB)	23 (2013)	21 (2017)	15 (2022)
Under-five mortality rate decreased (per 1,000 LB)	31 (2013)	27 (2017)	22 (2022)
Prevalence of stunting (%)			
a) Below 5 years old	33.4 (2015)	28.8 (2019)	26.7 (2019)
b) 5-10 years old	31.2 (2015)	25.2 (2019)	No targets
c) 10-19 years old	31.9 (2015)	26.8 (2019)	
Prevalence of wasting (%)			
a) Below 5 years old	7.1 (2015)	5.8 (2019)	5.5 (2019)
b) 5-10 years old	8.3 (2015)	8.0 (2019)	No targets
c) 10-19 years old	12.5 (2015)	11.7 (2019)	
Mortality rate attributed to cardiovascular disease, cancer, diabetes, and chronic respiratory diseases decreased (number of deaths per 100,000 population aged 30-70 years old)	462.5 (2016)	453.8 (2018)	367.1 (2022)
Tuberculosis incidence decreased (per 100,000 population)	434 (2016)	554 (2018)	510 (2022)
Number of newly diagnosed HIV cases decreased	9,264 (2016)	12,778 (2019)	18,900 (2022)
Percent of provinces that are malaria-free increased (%)	40 (2016)	62 (2018)	92.5 (2022)
Out-of-pocket health spending as percentage of total health expenditure	45.0 (2016)	42.0 (2019)	No target in 2019 TBD for 2022

The use of modern contraception, on average, has increased marginally between 2013 (23.5%) and 2017 (24.9%) considering all women aged 15 to 49 years. However, among married women from the same age group, the increase was much higher

especially among married women 15 to 19 years of age (from 20.6% to 29.7%) and those 20 to 24 years of age (from 34.3% to 44.0%).

Table 10.2 Use of Modern Method of Contraception

AGE GROUP	CURRENT USE OF ANY MODERN METHOD OF CONTRACEPTION (ALL WOMEN)		MARRIED WOMEN CURRENTLY USING ANY MODERN METHOD OF CONTRACEPTION	
	2013	2017	2013	2017
TOTAL	23.5	24.9	37.6	40.4
15-19	2.4	2.9	20.6	29.7
20-24	16.2	18.7	34.3	44.0
25-29	30.6	31.2	42.3	43.2
30-34	37.7	39.6	44.9	47.0
35-39	37.7	37.5	42.5	44.7
40-44	33.9	35.7	38.8	40.0
45-49	20.2	21.4	23.5	24.4

Managing the COVID-19 pandemic exposed the shortcomings of the country’s health care system particularly in terms of prevention, control, and mitigation of infectious diseases. It also became evident that the country lacked health care workers and that digital infrastructure and health information system were fragmented and inefficient. The fragmentation of service delivery has made coordination and communication between national and local government units (LGUs) difficult. Furthermore, since service delivery is mostly facility-based, the ensuing mobility restrictions threatens to worsen nutrition and health outcomes, or reverse the gains achieved so far. Over the near term, the involuntary shifts in lifestyle and behavior in response to the quarantine restrictions has resulted in a rise in mental health problems, especially among those directly affected by the pandemic (e.g., caught the virus, lost their loved ones and their jobs).

Ultimately, the sector with its current capacity must effectively implement its programs and provide quality services both at the national and local levels, in pursuit of improving nutrition and health care outcomes, while maintaining efforts to contain and prevent the spread of COVID-19 and to prepare for massive vaccination. Moving forward, the sector will expand its use of innovative delivery mechanisms, such as telemedicine, enhance outreach programs

by improving the capacity of target beneficiaries for home-based care, and use various media to deliver information, education, and communication services on proper nutrition and health. Moreover, amid competing demands for resources, it is also important to ensure efficient spending and to secure enough funds for the full implementation of key legislations such as the UHC Act and the *Kalusugan at Nutrisyon ng Mag-Nanay Act*.

Basic, higher, and technical education

The Philippines has institutionalized reforms to expand access to education at all levels (i.e., K to 12 Program, Universal Access to Quality Tertiary Education). A major accomplishment is the increase of the mean years of schooling to 10.0 in 2018, which is close to the end of plan target of 11.3. At the basic education level, the elementary and junior high school net enrolment rates (NER) were at 94 percent and 83 percent versus the original 2019 targets of 93.31 percent and 72.32 percent, respectively, while K to 6 and Grades 7 to 12 completion rates in 2019 were at 97 percent and 77 percent versus the targets of 87.18 percent and 77.48 percent for elementary and junior high school.

However, there remains a big gap in the quality of education. Compounding the problem is that the data on quality of learning are not comparable over time. The 2017 National Achievement Test (NAT) scores could not be compared to the 2015 baseline data because the tests have been modified in 2017 to be more aligned with 21st century skills, as emphasized in the K to 12 curriculum. The 2017 scores shown in Table 10.3 pertain to the proportion of students who can be considered as at least moving towards “mastery.” These are estimated at 23.11 percent among Grade 6, 32.78 percent among Grade 10, and 13.54 percent among Grade 12 students. In 2018, the Department of Education (DepEd) changed the methodology to measure “proficiency” instead of “mastery.” The 2018 NAT⁷ scores show that only 16 percent of Grade 6, 34 percent of Grade 10, and 14 percent of Grade 12 learners scored as “nearly proficient.”

At the higher education level, the Universal Access to Quality Tertiary Education Act benefitted 1,132,620 higher education students in state colleges and universities (SUCs) and local universities and colleges (LUCs) in AY 2018-2019. In technical and vocational education and training (TVET), while certification rate remained higher than 90 percent, most of the TVET courses offered are low-level skills, seven of which are even likely to become irrelevant as a result of automation. The passage of the 11th Regular Foreign Investment Negative List (RFINL) and Transnational Higher Education Act (Republic Act [RA] 1148) is expected to improve competitiveness of education and training institutions by bringing international quality standards and expertise into the country.

Table 10.3 Core Education Outcome Indicators: Targets vs Accomplishments, 2017-2019

INDICATOR	BASELINE VALUE (YEAR)	TARGETS			ACCOMPLISHMENT		
		2017	2018	2019	2017	2018	2019
Sector Outcome: Lifelong learning opportunities for all ensured							
Mean years of schooling increased	8.9 (2014)	N/A	N/A	N/A	9.3	10.0	N/A
Functional literacy rate increased	90.3 (2013)	N/A	TBD	N/A	N/A	N/A	N/A
Subsector Outcome: Quality, accessible, relevant, and liberating basic education for all achieved							
Net enrollment rate increased (%)							
Kinder	74.65 (2015)	80.46	83.37	86.28	83.70	83.13 (76.00)	63
Elementary	91.05 (2015)	92.18	92.74	93.31	94.19	94.79	94
Junior High School	68.15 (2015)	70.23	71.27	72.32	75.99	81.24	83
Senior High School	TBD	TBD	TBD	TBD	46.12	48.50	48

⁷ Data is not shown in the table because it estimates the proportion who are considered at least “nearly proficient” rather than the original measure of at least moving towards “mastery.”

INDICATOR	BASELINE VALUE (YEAR)	TARGETS			ACCOMPLISHMENT		
		2017	2018	2019	2017	2018	2019
Completion rate increased (%)							
Elementary	83.43 (2015)	85.31	86.25	87.18	92.41	97.15	97
Junior High School	73.97 (2015)	76.82	77.15	77.48	84.32	88.84	77
Senior High School	TBD	TBD	TBD	TBD	N/A	N/A	
Proportion of students performing at moving towards mastery, closely approximating mastery, or mastered increased (%)							
Elementary	64.93 (2015)	66.92	68.41	69.91	23.11*	97.15	97
Junior High School	14.37 (2015)	15.98	16.78	17.59	32.78*	N/A due to change in measurement from "mastery" to "proficiency"	
Senior High School	TBD	TBD	TBD	TBD	13.54*		
Proportion of students at low mastery reduced (%)							
Junior High School	14.88 (2015)	11.72	11.51	11.31	N/A	N/A due to change in measurement from "mastery" to "proficiency"	
Senior High School	TBD	TBD	TBD	TBD	N/A		
Quality of higher education and technical education and research for equity and global competitiveness improved							
Number of HEIs in reputable international rankings increased	4 (2016)	5	6	7	8	6	8
Certification rate of TVET graduates increased (%)	91.9 (2016)	85	85	86	93	92	94.3

* 2017 data not comparable with 2015 baselines due to change in methodology. There was a shift in the design of the 2017 NAT because the questions were framed, in line with the K to 12 program's focus on 21st century skills.

Given the huge investments in education, the challenge is to improve the quality of education while also anticipating the demands of the Fourth Industrial Revolution (FIRE). Availability of teachers with specialized skills (particularly senior high school [SHS]), mismatch in teaching assignments with areas of specialization, and delayed release of education inputs affect achievement of education outcomes at the basic education level. In higher education, inadequate support and/or incentives to pursue graduate studies, undertake research and publish, and limited domestic and international

collaboration to facilitate knowledge transfer may have contributed to the low performance of the higher educational institutions (HEIs). Further, lack of collaboration with industry partners contributed to the mismatch between skills taught in schools and labor market requirements. Flexible learning will be adopted to continue delivery of education services during the COVID-19 pandemic. Major challenges like issues of expensive, slow, and unreliable internet connection, and added expenses for devices are needed to access online learning resources. This will also

require adjustment measures to reskill teachers on online teaching and re-orient parents and guardians towards homeschooling, distance education, and other modes of flexible learning.

Labor market policies

Improved and increased employment opportunities in the past three years led to the continuous decline in unemployment rate and overall quality of employment (*see Chapter 1*). After an initial uptick of 5.7 percent in 2017, the unemployment rate fell to 5.3 percent, meeting the upper end of the target for 2018. It declined further to an average 5.1 percent in 2019, in line with the full-year target of 4.3 percent to 5.3 percent for 2019. Youth inactivity, likewise, showed improvement, as the proportion of youth not in education nor in employment (NEE)

consistently declined beginning 2017, thus, putting the government on track, in terms of achieving its annual targets in reducing the share of youths-at-risk.

Meanwhile, fostering women's economic participation warrants improvement, as female labor force participation rate (LFPR) remains modest, relative to the annual plan targets. Among the top cited reasons for deferring work among women, is the assumption of household responsibilities and duties, including childcare. Nonetheless, laws have been recently enacted to further create an inclusive labor market for Filipinos, such as the 105-Day Expanded Maternity Leave Act, First Time Jobseekers Act, Telecommuting Act, and the Social Security System (SSS) Act of 2018.

Table 10.4 Core Labor Outcome Indicators: Targets vs Accomplishments

INDICATOR	BASELINE VALUE (YEAR)	PLAN TARGETS			ACCOMPLISHMENT		
		2017	2018	2019	2017	2018	2019
Sector Outcome: Income-earning ability increased							
Percentage of youth NEE decreased	23.0 (2015)	20.5-22.5	19.5-21.5	18.5-20.5	21.7	19.8	18.7
Subsector Outcome: Employability improved							
Duration of school-to-work (STW) transition of college graduates reduced (years)	2* (2008)	N/A	N/A	N/A	**	**	**
Duration of STW transition of high school graduates reduced (years)	4* (2008)	N/A	N/A	N/A	**	**	**
Percentage of discouraged workers reduced (%)	12.5 (2014)	12.5	12.0	11.5	11.6	11.5	12.6
Labor force participation of women increased (%)	50.1 (2015)	49.3	49.7	50.1	46.2	46.6	47.6

* Based on an Asian Development Bank (ADB) Survey on Filipino Youth Labor Market Experience in 2008.

**The duration of STW transition will be measured through rider questions in the Labor Force Survey (LFS) in 2021. Prior to this, there has been no official means of measuring STW transition.

The onslaught of the COVID-19 pandemic resulted in a surge, perhaps temporary, displacement of workers (i.e., local workers and overseas Filipino workers), as global and domestic economic activities slowed down. The enactment of the Telecommuting Act and SSS Act proved to be very opportune as these reforms laid out the necessary legal framework to support remedial measures to the disruption caused by the pandemic, including the implementation of various flexible work arrangements (FWAs) both in the government and private sectors (e.g., telecommuting, reduction of work hours/days, and rotation of employees) and the provision of unemployment benefits. In addition, the immediate digitalization of the application system of the SSS unemployment benefit in late June 2020, resulted in the increased uptake of the program, catering to an additional 151,617 applicants from July to September⁸ compared to the 27,103 recorded applicants between March to June 2020.

Prior to the pandemic, the landscape of work has changed rapidly with the rise of FIRE. COVID-19, however, has brought unprecedented challenges, causing firms to swiftly migrate to new working arrangements to safeguard workers. With the intensified adoption of remote and flexible work mechanisms, technology plays a critical role in redesigning and transforming the way individuals work. The challenge is to re-tool and upskill the current workforce and develop the future workforce to be able to adapt and thrive amidst the changes. Consequently, there is a need to ensure that new and flexible ways of working will not reduce the well-being of workers or expose them to forms of occupational hazards and health risks. Possible risks include performing work outside regular business hours, developing musculoskeletal disorders due to non-ergonomic facilities (i.e., inadequate computer workstations), and getting infected for those physically reporting to work.

⁸ SSS data as of September 14, 2020.

Strategic Framework

Figure 10.1 Strategic Framework to Transform Human Capital Development towards Greater Agility



Targets and Strategies

Improving nutrition and health outcomes for all

Nutrition and health outcomes for all will be improved as the government (a) guarantees to provide care services at all life stages; (b) ensures a responsive and resilient health system; and (c) sustains equitable financing of nutrition and health services. The targets are given in Table 10.5, followed by a more detailed discussion of the strategies to achieve these targets.

Baseline and targets for mortality rate attributed to cardiovascular disease, cancer, diabetes, chronic respiratory diseases, and TB incidence were recomputed. Indicated targets relating to TB incidence and number of newly-diagnosed HIV

cases are higher than the baseline. According to the Department of Health (DOH), these are expected due to the intensified case findings and the use of better methods for detection. Meanwhile, modern contraceptive prevalence rate was disaggregated to reflect the contraceptive use of all women of reproductive age and those women who are currently married or in union. Moreover, the proportion of fully-immunized children was added as a new core indicator. As part of improving the epidemiological capacity of the country resulting from the COVID-19 pandemic, the percentage of regions with at least one Biosafety Laboratory Level 2 (BSL2) with reverse transcription polymerase chain reaction (RT-PCR) was included in the list of core indicators.

Table 10.5 Updated Plan Targets to Improve Health and Nutrition Outcomes for All

INDICATOR	BASELINE VALUE (YEAR)	TARGETS			
		2020*	2021	2022	END OF PLAN
Sector Outcome: Nutrition and health outcomes for all improved					
Life expectancy at birth increased (years)					
a. Male	69.63 (2015-2020)	**	**	71.3	71.3
b. Female	75.91 (2015-2020)	**	**	77.5	77.5
Subsector Outcome: Care at all life stages guaranteed					
Maternal mortality ratio decreased (per 100,000 LB)	95 (2016)	**	**	108	108
Neonatal mortality rate decreased (per 1,000 LB)	13 (2013)	**	**	10	10
Infant mortality rate decreased (per 1,000 LB)	23 (2013)	**	**	15	15
Under-five mortality rate decreased (per 1,000 LB)	31 (2013)	**	**	22	22

INDICATOR	BASELINE VALUE (YEAR)	TARGETS			
		2020*	2021	2022	END OF PLAN
Mortality rate attributed to cardiovascular disease, cancer, diabetes, and chronic respiratory diseases decreased (number of deaths per 100,000 population aged 30-70 years old)	462.5 (2016)	397.7	382.4	367.1	367.1
Proportion of households meeting 100% recommended energy intake increased (%)	31 (2015)	**	29.3	32.2	32.2
Prevalence of stunting among children under 5 decreased (%)	33.4 (2015)	**	29.8	28.8	28.8
Tuberculosis incidence decreased (per 100,000 population)	434 (2016)	537	526	510	510
Number of newly diagnosed HIV cases decreased ⁹	9,264 (2016)	**	17,900	18,900	18,900
Subsector Outcome: Responsive and resilient health system ensured					
Proportion of women who are using modern contraceptive methods increased (%)					
Among women of reproductive age (15-49 years old) who are currently married or in union	37.6 (2013)	**	62.0	65.0	65.0
Among women of reproductive age (15-49 years old)	23.5 (2013)	28.0	29.0	30.0	30.0
Proportion of fully immunized children increased (%)	68.5 (2013)	95.0	95.0	95.0	95.0
Percentage of regions with at least one BSL2 (with RT-PCR)	70.6 (June 2020)	100	100	100	100
Subsector Outcome: Responsive and resilient health system ensured					
Out-of-pocket health spending as percentage of total health expenditure ¹⁰ decreased	45.0 (2016)	**	**	TBD	TBD
National Health Insurance Program availment rate increased	80.52 (2017)	**	**	100	100
Percentage of population covered by social health insurance	91 (2016)	100	100	100	100

* 2020 original targets set/approved in 2016/prior to the pandemic retained

**Note that the responsible agencies (e.g. DOH, PhilHealth) did not provide annual targets for these indicators as data are not available for these years (or only end-of-plan target was provided by the concerned agencies).

⁹ Due to low condom use, those who have not started treatment could still inadvertently pass the infection to others, thus, the number of HIV cases diagnosed per year is expected to grow.

¹⁰ The Philippine National Health Accounts (PNHA) was revised based on the National Accounts, with 2018 as base year. With this, baseline data of this indicator was changed accordingly. The 2019 PNHA was released in October 2020.

Guaranteeing care at all life stages

Provide quality nutrition and health care interventions at all life stages. The Philippine Plan of Action for Nutrition (PPAN) will continue to prioritize the selected 32 provinces (as determined by the Human Development and Poverty Reduction Cluster) with the highest rates of poverty in its interventions and to pay greater attention to stunting and teenage pregnancy. The LGUs, in coordination with the DOH and National Nutrition Council (NNC), will ensure that appropriate nutrition and health-related interventions and services will be given for the first 1,000 days of life (covers pregnancy and the first two years of life) as the so-called window of opportunity to influence the mental, productive, and health capacity and break the intergenerational cycle of malnutrition.

Addressing malnutrition in all its forms across age groups calls for a whole-of-government approach in the provision of nutrition programs, involving not only LGUs but also national government agencies (NGAs), such as the DOH, NNC, DepEd, DSWD, Department of Agriculture (DA), and the Department of Science and Technology – Food and Nutrition Research Institute (DOST-FNRI). Implementation of nutrition-specific interventions at the local level, such as Nutrition in Emergencies, Overweight and Obesity Management Prevention Program, Supplementary and School-Based Feeding Program, Food Fortification, and National Dietary Supplementation Program will be strengthened, through intensified coordination and collaboration of the LGUs with implementing agencies given new normal conditions. These will be complemented by nutrition-sensitive projects (e.g., *Gulayan sa Paaralan*, sustainable livelihood, adolescent health and nutrition development, farm-to-market [FMR] roads, and child nutrition, among others). The implementation of the Malnutrition Reduction Program of the DOST-FNRI, which provides age-appropriate complementary foods for babies and other vulnerable groups, will be continued. Further, nutritious complementary foods, snack foods, and meals will continue to be produced and consumed. Fortified staples will be produced and included in all social safety net programs, such as dietary supplementation among pregnant

women, 6-23 months old children, and children in child development centers and public elementary schools. This will be scaled up through expanded partnerships with agrarian reform beneficiaries, organizations, cooperatives, small and medium-sized enterprises (SMEs), among others (*see Chapter 11*).

Sexual and reproductive health services will be intensified to address adolescent or early pregnancy. DepEd will ensure that there will be comprehensive sexuality education in schools, to include adolescent-friendly health service packages. Relatedly, the Commission on Population and Development (POPCOM) and DOH will spearhead and intensify demand- and supply-side interventions in improving reproductive health services, including addressing unmet need for modern family planning (FP). These include scaling up community- and facility-based demand generation interventions, and ensuring availability of FP commodities at service delivery points by instituting reforms and enhancements in the FP logistics system. FP competency-based training for health providers will be continuously provided (*see Chapter 13*). Uninterrupted provision of FP and reproductive health services and commodities, especially in areas under enhanced and general community quarantine (CQ), will be pursued.

The triple burden of disease-communicable, non-communicable, and urbanization- and industrialization-related diseases will be continuously addressed, as this remains a serious public health concern. The DOH will continue to intensify COVID-19, TB, and HIV case-finding activities. There will be continuous contact tracing, timely testing, isolation, and treatment of persons affected by COVID-19. Adequate TB services will be provided for TB-infected patients, especially for those drug-resistant TB cases and people living with HIV (PLHIV). Antiretroviral Therapy for PLHIV will continuously be provided. Integrated services for HIV care will be expanded, by establishing social hygiene clinics, sundown clinics, and HIV care facilities. Moreover, TB and HIV education and promotion programs will be enhanced to increase public awareness and reduce stigma.

The DOH will also develop or strengthen programs to address emerging and re-emerging infectious diseases, such as dengue. Moreover, the government will aggressively implement the National Immunization Program, including measures to encourage demand and secure the supply of vaccines and other implements. Relatedly, the government will also guarantee effective delivery of the COVID-19 vaccine once available through the development and implementation of a vaccine procurement and distribution plan, which includes crafting of appropriate vaccine allocation framework, readying logistics channels and cold chain facilities, ensuring communication strategies, and setting-up monitoring mechanisms.

On addressing non-communicable diseases (NCDs), the implementation of policies and programs will be intensified to reduce the prevalence of behavioral risk factors such as tobacco use, harmful use of alcohol, physical inactivity, and unhealthy diet. These include sustained implementation of smoking bans in public areas such as schools, workplaces, sidewalks, and public vehicles; anti-smoking campaigns; smoking cessation program; and increased taxes on tobacco products, in line with the World Health Organization (WHO) Framework Convention on Tobacco Control and existing tobacco policies. The Department of Finance (DOF) will continue to impose excise tax on sweetened beverages along with taxes for alcohol products and e-cigarettes, and strategies to reduce salt consumption. The whole-of-government will implement and encourage wellness and fitness programs, as well as activities to promote work-life balance to avoid NCDs, stress, and other mental health effects. Policies to promote healthy lifestyle and diet will be pursued and implemented both in the public (i.e., government offices, public schools) and private sectors.

Meanwhile, the PhilHealth will offer packages for substance and drug abuse management, rehabilitation, and treatment services. Existing

PhilHealth benefit package, such as medical detoxification will be expanded. More *Balay Silangan* facilities initiated by Philippine Drug Enforcement Agency (PDEA)¹¹ will also be established.

As indicated in the Mental Health Act (RA 11036), the national government, through the DOH, will fund the establishment and assist in the operation of community-based mental health care facilities. The LGUs and academic institutions will create and implement mental health programs, which will be in accordance with the general guidelines set by the Philippine Council for Mental Health (PCMH). These services include prevention, promotion, treatment, and rehabilitation, including psychosocial support, especially during the time of pandemics.

To prevent road traffic injuries, stricter enforcement of laws and standards to mitigate risks factors (i.e., vehicle standards, speeding, drunk driving, wearing of seatbelts or helmets), safer infrastructure, and enhanced post-crash care will be continuously promoted to avoid these accidents.

The health of the elderly will also be given priority through specific interventions, including palliative and hospice care.

Promote a healthy lifestyle. A healthy lifestyle is key to good health. The strategies to promote a healthy lifestyle will first improve nutrition and health literacy, and then, the health-seeking behavior of Filipinos.

Various stakeholders, such as the LGUs, DepEd, DSWD, among others, will be tapped, to ensure that nutrition and health promotion is integrated in their programs. For instance, the LGUs will be enjoined to intensify health and nutrition campaigns. The DepEd will formulate modules on health literacy and health rights to be integrated in the school curricula and activities. More

¹¹ *Balay Silangan* is a national drug reformation program initiated by Philippine Drug Enforcement Agency (PDEA). This is reformative and rehabilitative in nature intended for non- drug users who voluntarily surrendered or availed of the Plea Bargaining Program. It provides general interventions like continuing education and health awareness, and psychological/spiritual/physical activities such as counseling, moral recovery, values formation, and personal and life skills. Reformers are also taught with livelihood and skills training programs.

health modules can be incorporated in the Family Development Sessions of the *Pantawid Pamilyang Pilipino* Program (4Ps) of the DSWD. Government instrumentalities will be mobilized for aggressive public health education campaigns, including effective risk communication through various media (i.e., television, radio, social media) to encourage social distancing, better hygiene, self-isolation, and health-seeking behavior at the first sign of infectious disease symptoms (e.g., COVID-19). With the new normal, the minimum public health standards (i.e., for COVID-19 mitigation) through non-pharmaceutical interventions, such as physical distancing, ensuring proper ventilation, regular and thorough disinfection, provision of alcohol/sanitizers/soap, temperature check, use of personal protective equipment (PPE), among others, will be strictly implemented.

To improve health-seeking behavior, the PhilHealth will work with private service providers to offer preventive services, diagnostics, laboratory, medicines, dental and other medical services, as well as packages for regular annual check-up for all employees—public and private.

Ensuring responsive and resilient health system

Ensure access to essential quality and affordable health and nutrition products and services at appropriate levels of care. The passage of UHC Act will ensure that every Filipino has immediate eligibility and access to preventive, promotive, curative, rehabilitative, and palliative care for medical, dental, emergency, and mental health services. The law will address the issue on non-functioning and fragmented service delivery networks and weak referral system in the country (see *Box Article 10.1*). Moreover, the DOH will require all hospitals to establish a public health unit that will provide navigation support to the patients

within the health facility, support the national health public programs' implementation, and institutionalize coordination mechanism with the primary care provider networks.

In areas where physical access to health professionals are limited or restricted, the country's telehealth system will be strengthened and expanded by the DOH, in coordination with other agencies, including the DICT and DOST. Telemedicine, including primary care consultations, will be established, so that during emergencies (e.g., COVID-19 pandemic), the number of patients going to hospitals and health facilities will be reduced. However, systems, protocols, and quality control measures need to be in place so that this can be effective and not harm patients. Health technology assessment (HTA) process¹² will also be institutionalized.

During emergencies, priority will be given to ensure the supply of essential health and nutrition products and commodities. The DOH will institute an emergency supply management and logistics system, with an adequate national stockpile of medicines, medical supplies, PPEs, ventilators, and related resources, including FP commodities, for use during public health emergency. The Department of Budget and Management (DBM) and Government Procurement Policy Board (GPPB) will work on policies and procedures to expedite procurement of these necessary equipment and health supplies.

Likewise, to ensure that proper nutrition is continuously provided during emergencies (especially among children, pregnant and breastfeeding women, and senior citizens), the Nutrition Cluster will issue advisories to guide the LGUs and relevant partners on appropriate nutrition response. This should be consistent with the National Policy on Nutrition Management in

¹² HTA refers to the systematic evaluation of properties, effects, or impact of health-related technologies, devices, medicines, vaccines, procedures, and all other health-related systems developed to solve a health problem and improve quality of lives and health outcomes (UHC Act IRR, Section 4.18).

Emergencies and Disasters but will be modified depending on contextual factors. The NNC and DOST-FNRI will also continue advocating for recipes that would help transform relief goods (i.e., canned goods, instant noodles) into more nutritious meals.

Upgrade and equip health facilities. To address the poor conditions of public health facilities in the country, more public health facilities will be constructed and upgraded, especially primary health care facilities (*see Chapter 19*). Hospitals will be equipped with multi-specialty training capabilities, reference laboratories, and advanced medical equipment. There will also be an increased number of fully-equipped isolation rooms and critical care beds in hospitals. Moreover, quarantine facilities in major ports and airports need to be improved to enable the Bureau of Quarantine (BOQ) to better perform its mandate on ensuring health surveillance and security. Budget for construction and rehabilitation of public health facilities will be effectively utilized through improved procurement processes and supply chain management.

Improve the status and supply of Human Resources for Health (HRH). The DOH will ensure that there will be equitable distribution of HRH, including allied health professionals (e.g., dietitians, nutritionists, therapists, medical technologists), and continuous improvement of their working conditions by: (a) continuing the provision of pre-service full scholarship program (with return service contract) to students in medical-related fields (including virology, microbiology, among others) offered by both national and local governments; (b) continuing augmentation, redistribution, and retention of health workers in challenged priority provinces, far-flung municipalities, and geographically isolated and disadvantaged areas (GIDA) through the DOH HRH Deployment Program; (c) monitoring and revisiting the implementation of Magna Carta of Public Health Workers by the LGUs; (d) providing appropriate/competitive salaries, benefits, and incentives to public and private health workers, among others; and (e) progressively increasing the number of permanent positions for health workers

(e.g., provincial/city/municipal nutrition action officers, barangay nutrition scholars, barangay health workers) to achieve the appropriate health worker-to-population ratio.

Accordingly, as provided for in the UHC Act, a National Health Human Resource Master Plan will be formulated and implemented. The DOH will also improve the recruitment and deployment process. Pools of medical and allied health professionals will be mobilized, especially during health emergencies, per level of care nationwide. In addition, a network of community health volunteers who will assist in providing surveillance and information dissemination services during health emergencies will be established. These will ensure that the quality and supply of HRH will meet the needs of the population, especially of vulnerable groups (e.g., persons with disabilities [PWD]) during health emergencies.

Improve epidemiological and surveillance capacities of the country. Epidemiological and surveillance capacities for COVID-19 and other infectious diseases will be improved at the national, regional, provincial, and municipal levels, focusing on areas near major points of entry and strategic LGUs in a region. Specifically, an operational BSL2 must be present in every region, stocked with adequate number of testing kits. Technology, such as mobile applications, can be utilized to facilitate contact tracing and real-time surveillance of infectious diseases particularly COVID-19. Moreover, local or regional Centers for Disease Prevention and Control (CDC) will be established under the supervision of a national CDC or the Research Institute for Tropical Medicine (RITM). The CDC will be a dedicated agency that will protect public health and safety through the control and prevention of diseases.

On the other hand, the DOH and LGUs should also ensure strict implementation of the Mandatory Reporting of Notifiable Diseases and Health Events of Public Health Concern Act (RA 11332), especially the provisions on establishing and maintaining functional disease surveillance and response systems. Accordingly, the DOH will spearhead the formulation of a national infection

prevention and control guidelines/strategies, including quarantine and disinfection protocols that will guide national and local implementers, both in the public and private sectors (e.g., hospitals, health facilities). The strategies and guidelines will take into account the country's experience and global best practices in responding to the COVID-19 pandemic and other infectious diseases.

Sustaining equitable health financing

Secure sustainable investment on nutrition and health and ensure efficient and equitable use of nutrition and health resources. To secure investments and ensure equitable use of health and nutrition resources, the following strategies will be pursued: (a) provide additional resources to sustain the implementation of the UHC Act; (b) implement the Philippine Plan of Action for Nutrition's (PPAN) LGU mobilization strategy to focus on promoting strategic nutrition leadership and governance, emphasizing the value for money investment in the first 1000 days of life; (c) promote complementation of health financing among national government, local government, development partners, and other stakeholders (e.g., private insurance, health maintenance organizations); (d) progressively increase the PhilHealth premium contribution with corresponding increase in benefits and improvement in premium payment protocols; (e) focus on financial resources for nutrition and health with high impact interventions; and (f) ensure funding for nutrition and health sector recovery activities and programs, especially at the local/community level. Moreover, the Implementing Rules and Regulations (IRR) of the National Disaster Risk Reduction and Management Council (NDRRMC) Act will be revisited to ensure higher contingency budget for the management of health-related emergencies.

The Sin tax or excise tax levied on goods deemed harmful to society and individuals, will be implemented continuously to curb the practice or augment funding for health interventions under the UHC Act. Thus, increased tax on alcohol products, heated tobacco products (HTPs), and Electronic Nicotine Delivery Systems, which include electronic cigarettes or vapor products, will be pursued,

along with continued imposition of excise tax on sweetened beverages and tobacco products.

Expand health insurance coverage and improve nutrition and health packages. With the UHC Act, all Filipinos are automatically enrolled in the National Health Insurance (NHI) Program. Existing benefit packages will continue to be implemented and can be expanded to include dental, mental, and nutrition packages, as well as benefit coverage for emerging and re-emerging diseases, as indicated in the HTA process. A no co-payment policy will also be implemented for those who opt to avail basic or ward accommodation and services. Moreover, the PhilHealth will enhance provider payment mechanisms to ensure cost-effective quality health care services. These strategies will help reduce households' out-of-pocket payment for health (*see Chapter 11*). Furthermore, the processing and reimbursement of hospital claims will be monitored and fast-tracked.

Cross-cutting strategies

Institute a fully-integrated and interoperable health information system and database. The following measures will be implemented to improve the availability, timeliness, and quality of data and to make the health information system and databases interoperable: (a) conduct training and capacity building for local administrative health and nutrition data collection units; (b) improve electronic medical records in all health facilities that will enable patient records to be accessible throughout the health system and provide real-time data with due regard for data privacy; (c) develop a unified health information system where all data, including those from the private health care providers, will be consolidated to have seamless navigation and referral mechanisms between health care providers; and (d) utilize artificial intelligence and big data analytics to understand the spread of diseases (e.g., COVID-19) to improve treatment methods and streamline medical care, to determine the effectiveness of government response, and to allow real-time collection, consolidation, analysis, and reporting of health data.

Strengthen health research and development, and evidence-based decision-making. Capacity to conduct evidence-based policymaking, decision-making, program planning, and implementation, in the health and nutrition sector will be strengthened. Concerned agencies, including health and nutrition research institutes (e.g., DOH, RITM, NNC, DOST-FNRI, DOST-Philippine Council for Health and Research Development [PCHRD], among others) will enhance their internal capacity to produce high quality health and nutrition studies and researches. There will be increased support for local healthcare scientists and higher investments in health researches especially on vaccine and drug discovery and development (e.g., COVID-19 vaccine) and on zoonotic diseases and risk factors. A Health Impact Assessment (HIA) will likewise be conducted following the UHC Act.

Elicit multi-sector, multi-stakeholder support for nutrition and health. Civil society organizations (CSO), including volunteers, will be mobilized to participate in budget development, service delivery, and monitoring and evaluation (M&E), through their involvement in local development councils and other special bodies. In addition, development partners can also be tapped to provide official development assistance (ODA) aligned with the nutrition and health agenda. Improved health and nutrition outcomes can be achieved with the help and involvement of the private sector in the provision of health care and nutrition services. For nutrition, in particular, the NNC will strengthen the

existing country, regional, and global multisectoral partnerships with CSOs, academe, business, and development partners through the Scaling Up Nutrition Movement networks with the “engage-inspire-invest” slogan. Nutrition and health components will be integrated in all major flagship programs of the government.

Ensure transparency, accountability, and regulatory measures in the nutrition and health sector. This will be done by: (a) developing innovative regulatory and monitoring mechanisms to promote adequately fortified staples and food products, and equitable distribution of quality and affordable health goods and services; (b) establishing a performance monitoring unit to track the progress of reforms and medical audits and to oversee third-party monitoring; (c) adopting responsive organizational structure, staffing patterns and skill-mix at all levels of the health system; and (d) monitoring and evaluating health and nutrition programs through the Monitoring and Evaluation of Local Level Plan Implementation (MELLPI), being conducted by the NNC member agencies, to ensure compliance and improvement of nutrition status at the local level. The DILG will also continue to offer incentives and provide guidelines to ensure transparency and accountability among LGUs, in delivering nutrition and health care services, especially during health emergencies (e.g., pandemics).

Box Article 10.1 The Universal Health Care Act

The UHC Act (RA 11223) was enacted into law on February 20, 2019. Its implementing rules and regulations (IRR) were approved on October 10, 2019. The UHC Act automatically includes all Filipinos into the NHI Program and grants immediate eligibility and access to preventive, promotive, curative, rehabilitative, and palliative care, with primary care services as priority. All members are guaranteed zero co-payments for basic/ward accommodations in government hospitals, and fixed, co-payment for non-basic admissions in government and accredited private hospitals.

Importantly, the UHC Act is not only limited to providing health financing services (i.e., PhilHealth insurance) but also covers improving health service delivery, local health system, health regulation, and health governance and accountability. For instance, under the UHC, all local health systems will be integrated into the province-wide health system to be composed of municipal and component city health systems, and citywide health systems to refer to highly-urbanized city-, and independent component city-wide health systems. The local health system refers to all health offices, facilities and services, human resources, and other operations relating to health under the management of the LGUs. The said integration will be facilitated by DOH and DILG. In addition, a “Special Health Fund” will be created to pool and manage health resources, including income from PhilHealth and province- and city-wide health systems.

Also under the UHC Act, a National Health Human Resource Master Plan will be implemented to provide appropriate health workforce based on population needs. The DOH will lead and institutionalize a multi-stakeholder HRH Network, composed of both public and private organizations and agencies, to formulate and oversee the sustainable implementation, monitoring, periodic evaluation, and reformulation of the Master Plan for the management and development of HRH. Moreover, a National Health Workforce Support System will be established to assist LGUs in human health resource needs. Deployment of health professionals and health workers in GIDAs will be prioritized. Existing and new allied and health-related degree and training programs will be expanded and all allied and health-related government-funded scholars must enter into a return service agreement with both the training institution/facility and DOH for at least three years with compensation.

Source: DOH. UHC. <https://www.doh.gov.ph/UHC>

Strengthen leadership, management capacities, coordination, and support mechanisms. The national government will provide technical assistance to the LGUs to improve the delivery of health and nutrition services at the local level. For instance, the Barangay Health Emergency Response Teams (BHERT) will be trained on prevention and mitigation, preparedness, and response measures during public health emergencies at the local/community level. The LGUs may also initiate their own local programs and projects that will supplement the programs of the national government, to ensure nutrition and health for all. This will further strengthen coordination and collaboration among the national and local government agencies in implementing nutrition and health programs in the country. By 2022, the implementation of the *Mandanas* ruling would further strengthen the capacity of the LGUs in delivering health and nutrition services, as some of the functions of the national government will be shifted to the LGUs.

Ensuring flexible lifelong learning opportunities for all

Table 10.6 provides the updated plan targets in ensuring lifelong learning opportunities for all. Targets on access to basic education (net enrollment rate and completion rate) were adjusted considering the COVID-19 pandemic. Targets for basic education quality were also revised to take into account the shift from measuring mastery towards measuring proficiency, with the new indicator being the proportion of learners achieving at least “nearly proficient” in the NAT, interpreted as learners with a mean percentage score in the range of 50 to 74. The target on functional literacy rate is yet to be determined, after consideration of the effect of the pandemic and the quarantine restrictions.

Table 10.6 Updated Plan Targets to Ensure Lifelong Learning Opportunities for All

INDICATOR	BASELINE VALUE (YEAR)	TARGETS			
		2020*	2021	2022	END OF PLAN
Sector Outcome: Ensuring lifelong learning opportunities for all					
Life expectancy at birth increased (years)					
Mean years of schooling increased	10.0 (2018)	N/A	N/A	11.3	11.3
Functional literacy rate increased (%)	90.3 (2013)	N/A	N/A	TBD	TBD
Subsector Outcome: Quality, accessible, relevant, and liberating basic education for all achieved					
Proportion of school-aged population participating in basic education (Net Enrollment Rate) increased (%)					
Kinder	63 (2019)	89.19	92	95	95
Elementary	94 (2019)	93.87	96	97	97
Junior High School	83 (2019)	73.36	89	92	92
Senior High School	48 (2019)	64	68	80	80
Proportion of learners completing levels of education (Completion Rate) increased (%)					
Kinder to Grade 6	97 (2019)	97	97	98	98
Grade 7 to Grade 12	77 (2019)	82	83	84	84
Proportion of learners achieving at least nearly proficient in the NAT increased (%)					
Grade 6	16 (2018)	26	34	44	44
Grade 10	34 (2018)	43	52	61	61
Grade 12	14 (2018)	13	19	28	28
Subsector Outcome: Quality of higher education and technical education and research for equity and global competitiveness improved					
Certification rate of technical and vocational education and training (TVET) graduates increased (%)	91.9 (2016)	86	92	92	92
Number of higher education institutions (HEIs) in reputable international rankings increased	4 (2016)	8	7	8	8

* 2020 original targets set/approved in 2016/prior to the pandemic retained

Achieving quality, accessible, relevant, and liberating basic education for all

Strengthen the implementation of the Early Childhood Care and Development (ECCD) Program. A strengthened ECCD Program will provide future cohorts of learners a solid foundation for basic education. Thus, the ECCD Council will build a competent workforce throughout the country and ensure that child development centers strictly adhere to ECCD policies, guidelines, and standards. Health and nutrition will be emphasized to increase the physical resistance of learners to prevent sickness and disease and mainstream good personal hygiene practices.

Aggressively implement reforms under *Sulong EduKalidad*. The DepEd has embarked on the *Sulong EduKalidad* program to raise the quality of basic education by implementing aggressive reforms in four key areas:

- Review and update of the K to 12 curriculum in close coordination with relevant institutions towards a world-class curriculum that prepares learners for the future. A Futures Thinking Unit will be institutionalized within DepEd, to anticipate and update its curriculum to be responsive and adaptive to the needs of learners in the future.
- Improve the learning environment by ensuring that schools, classrooms, and other learning facilities promote productive learning experiences. Particular focus will be given to Last Mile Schools—schools in GIDAs, which are not prioritized when determining the needed inputs using established formulas and ratios for education inputs. Improved learning environments will utilize best practices in inclusive education, such as the Madrasah, Special Education (SPeD) and Indigenous Peoples' Education (IPEd) Programs, as well as the intensified implementation of the Comprehensive Sexuality Education (CSE) Program to address early pregnancy.
- Upskill and reskill teachers through a transformed professional development program that will equip teachers with 21st

century knowledge and skills and reinforce their competencies through the National Educators Academy of the Philippines Transformation; and

- Engage stakeholders for support and collaboration towards better research, analysis, and high-level advice for strategic policy, planning, and programming in delivering quality education for all.

These reforms will need to consider the rapid change in the education environment brought about by the COVID-19 pandemic. As face-to-face classes will only be allowed once a vaccine is available, other learning modalities will be carried out to maintain physical distancing.

Implement the Basic Education Learning Continuity Plan (BE-LCP). In order to mitigate the impact of the COVID-19 pandemic on learners and learning outcomes, the DepEd formulated the BE-LCP in May 2020 and is fully committed to its implementation. Under the new normal, the DepEd will improve and expand its flexible learning options identified in its LCP (i.e., modular and online blended learning, homeschooling, and television- and radio-based instructions) to continuously provide learning opportunities even in the midst of a pandemic. This entails developing self-learning modules, enhancing existing e-learning platforms (DepEd Commons), collaborating with telecommunication and broadcast media companies, and training teachers for the different delivery modes of education and the preparation of schools under *Brigada Eskwela* and *Oplan Balik Eskwela*. Guidelines and health standards in schools and workplaces need to be followed to protect the school community. The BE-LCP will also accelerate the country's transition to the future of education, which involves: (a) exploring new technologies for remote learning; (b) reframing the curriculum to prioritize essential/cross-cutting knowledge, skills, and mindsets; embedding multi-literacies in information technology (IT), science, technology, engineering, and mathematics (STEM), health, financial, and civic literacy; (c) anticipating educational opportunities from innovations; (d) reinforcing learning sciences, assessments, analytics, and knowledge mobilization; and (d)

“smartifying” learning spaces and resources, among others.

Participate in International Large-Scale Assessments (ILSA). The country’s participation in ILSAs such as the Trends in International Mathematics and Science Study, Programme for International Student Assessment, and Southeast Asia Primary Learning Metrics (SEA-PLM) will be prioritized to measure learning outcomes vis-à-vis other countries and provide information to evaluate the country’s progress in improving math, science, and literacy and build evidence for policy development and decision-making.

Improving quality of higher and technical education and research for equity and global competitiveness

Set up joint industry and government bodies for technical and vocational education and training (TVET) quality assurance. This will help technical vocational institutions (TVI) to keep their regulations and competency standards up-to-date and responsive, and to streamline processes needed to quickly undertake program review, facilities evaluation, updating of instruction and learning methodologies and materials, and formulation of innovative programs. This is in line with the thrust of the Technical Education and Skills Development Authority (TESDA) to institute separate and faster mechanisms to hasten the development of competency standards and training regulations of rapidly changing jobs.¹³

Enhance the implementation of Student Financial Assistance Programs (StuFAP), especially the Universal Access to Quality Tertiary Education Act (UAQTE). Given huge investments in expanding access to tertiary education during the first three years of the Duterte administration, sustainability of the program will have to be ensured. Particularly for a college degree, it will take at least four years to realize the returns from these education

investments. Timely awarding of StuFAPs in higher education and TVET will be ensured, especially among UAQTE beneficiaries, as most students may need the allowances to adjust to online and/or blended learning.

The Unified Financial Assistance System for Tertiary Education (UniFAST) Board will consider implementing a voucher system and improve the loan system to provide students their choice in school (whether public or private) and educational tracks (whether TVET or higher education) prior to the enrollment period. This would also level the playing field among quality private and public HEIs and TVIs. Long-term student loan program will be designed to consider factors such as affordability, viability, and risk management. Further, support interventions and adequate monitoring activities will be done to ensure that quality of education is not sacrificed in the course of policy implementation through: (a) strong monitoring of tuition and other school fees being charged by HEIs and TVIs to the government; (b) stricter quality assurance in HEIs, especially those enjoying government subsidies; (c) pursuit of per student normative cost budgeting; and (d) career guidance and financial counseling for student beneficiaries.¹⁴

Boost Philippine competitiveness in international university rankings. The Commission on Higher Education (CHED) will enhance its policies to establish a promotion system in SUCs, that incentivizes research and innovation. A quality assurance mechanism (e.g., SUC levelling and granting of autonomous/deregulated status) will also be institutionalized for both private and public institutions to reward international competitiveness. Support will be provided to centers of excellence and HEIs with quality programs in preparation for international accreditation.

Develop a roadmap for academic and technical programs responsive to the demands of FIRE. Continuous updating of the higher education curriculum will be implemented given the changes

¹³ TESDA National Technical and Education Skills Development Plan 2018-2022: Vibrant Quality TVET for Decent Work and Sustainable Inclusive Growth, TESDA, 2018.

¹⁴ NEDA, Socioeconomic Report 2018, NEDA, 2018.

in the basic education system and emerging needs of the country. Priority programs will be revisited and new programs (e.g., data science, nanotechnology, machine learning, green/renewable energy engineering, virology, molecular biology and biotechnology, urban agriculture, sustainable development, and food value chain) will be developed to steer students toward fields that will cater to emerging disciplines and address the country's post-pandemic needs. The TVET sector will formulate standards and promote TVET programs (diploma courses) that cultivate higher-order thinking skills to meet the demands of the labor market. Further, training centers and/or community colleges will be established at the local level to address regional human resource development requirements. Government agencies will also put in place mechanisms to ensure that regular data on the employability of graduates is available to guide students, educational planners, and industry.

Intensify distance-learning methods to promote learning continuity and retooling. In higher education, a flexible learning strategy will be pursued in delivering instruction by ensuring appropriate facility delivery system, faculty complement, and student support, as provided in CHED COVID-19 Advisory No. 7. The legal framework for distance learning is already in place through the Open Distance Learning Act of 2014 (RA 10650). As such, there is a need to extensively promote its implementation among HEIs. Similarly, the TVET system will adopt flexible learning delivery modes (i.e., face-to-face learning, online learning, blended learning, and distance learning) as provided in *OPLAN TESDA Abot Lahat: TVET towards the new normal*. Digital modalities will be optimized for distance learning, other options, such as TV, radio, printed materials, and/or mobile training laboratories will be made available in areas with zero to limited internet access.

Boost cutting-edge research and innovation initiatives. The government will build a robust national ecosystem for knowledge production and innovation, which is critical for the country's pursuit of a knowledge-based economy. Incentives to researchers in government will be provided by

fully implementing the Magna Carta of Scientists, Engineers, Researchers, and Other Science and Technology Personnel in the Government (RA 11312). The exclusion of SUC faculty from the Scientific Career System will also be re-evaluated to incentivize research productivity among faculty members. HEIs will be encouraged to tap *Balik* Scientists and engage in research and development initiatives in support to the National Harmonized Research and Development Agenda and the country's science, technology, and innovation (STI) priorities, which will be outlined in the National Innovation Agenda and Strategic Development (*see Chapter 14*). Productive partnerships, between HEIs and stakeholders in the community and industry, will also be intensified to integrate formal research and innovation efforts with informal grassroots knowledge and innovation.

Cross-cutting strategies

Develop future-ready adult learning interventions. The education agencies will promote adult learning through online and/or flexible learning (e.g., massive open online courses, blended training programs) to meet the growing demand for retooling and upskilling. Learning approaches will be modified to meet the needs of adult learners, especially workers displaced during the pandemic and those in occupations that are at risk of being automated. Adult learning programs may also be tapped in cultivating important values and functions in society, such as health-seeking behavior, financial literacy, cultural sensitivity, gender sensitivity, climate change adaptation, and disaster risk reduction and management, among others.

Modernize learning and teaching materials and methods. While the Philippines has been investing in curricular reforms and expanding ICT access in schools, other countries have already made substantial improvements in developing and adopting new pedagogical practices, such as artificial intelligence-enabled education, innovative classrooms, and gamification of learning, among others. The education sector needs to revisit pedagogical approaches, including assessment strategies and learning materials, to maximize the

potential of ICT in delivering flexible learning options while also improving learning outcomes. Training activities will be provided to teachers, parents, and guardians to enable them to adjust to flexible learning.

Promote graduate scholarships and teacher training programs. The promotion of graduate scholarships and teacher training programs is an important strategy to improve the quality of education at all levels, especially as the education system adapts to modern and digital learning environment. This will complement the DepEd's thrusts of in-service teacher development by creating a pool of teachers with advanced degrees ready to impart cutting-edge knowledge to students in basic education. Initiatives will be intensified to increase internationally-recognized trainings, graduate studies and post-doctoral opportunities for teachers and trainers.

Maximize government-academe-industry collaborations and international partnerships to ensure alignment of competencies and labor requirements. International partnerships and government-academe-industry collaborations will be tapped, especially in improving quality of instruction. Such linkages will enable the education sector to adapt to modern technologies, update curricula and develop programs or courses more quickly, strengthen work immersion programs (i.e., on-the-job trainings, apprenticeships) being implemented, and enhance complementation of curricular offerings among public and private tertiary education institutions. International collaborations, in particular, will also be useful in bringing global standards in educational institutions. Partnerships with international universities and institutions will improve the capabilities of teachers, enhance pedagogy, and help upgrade normal schools and universities, leading to better performance of students with regard to proficiency standards.

Formulate guidelines on the internationalization of education. Given recent policy reforms (issuance of the 11th RFINL and passage of the Transnational Higher Education Act [RA 11448]) that enabled the entry of international educational institutions,

faculty and trainers, and policy and regulatory frameworks will be updated. As such, the higher education internationalization framework will be revisited and a TVET internationalization framework will be formulated. These policy frameworks will subsequently serve as bases of guidelines and regulations to create mechanisms that will attract prospective international experts and partner institutions.

Develop an action plan to operationalize the Philippine Qualifications Framework (PQF). As the PQF has already been institutionalized, the next step is to come up with a plan or guidelines to facilitate the efficient implementation of the qualifications and recognitions system. The government will ensure that there are corresponding and efficient equivalencies and recognition systems, through the PQF for TVET graduates and technical-vocational-livelihood SHS graduates, should they pursue higher education through ladderized education. This mechanism will allow learners to pursue learning opportunities, upgrade qualifications, and/or smoothly transition through different learning pathways, whether for professional or personal goals.

Develop an accessible sporting culture. A sporting culture accessible to all Filipinos will be developed, as an instrument to promote human development and improve quality of life. This will be accomplished through enhancing the people's awareness of the role of sports for physical, emotional, and mental well-being, improving and expanding the grassroots sports development program of the Philippine Sports Commission (PSC), and strengthening local and international linkages in sports. Sports facilities will be developed and upgraded to be at par with global standards. The PSC's human resources, management, and research capacities will be improved to enhance its ability to lead, manage, and assess the country's sports programs. The Philippine Sports Institute will be institutionalized to direct the development and linkages of the grassroots and high-performance sports programs and the professional development of sports practitioners.

Increasing income-earning ability and enhancing adaptability

income-earning ability and enhancing adaptability of the Filipino workforce. Given the looming global recession due to decreased output, lower employment demand is anticipated in the near term. Hence, targets for core labor indicators were adjusted accordingly.

Table 10.7 shows the updated indicators and corresponding revised targets for increasing

Table 10.7 Updated Plan Targets to Increase Income-earning Ability and Enhance Adaptability of Filipinos

INDICATOR	BASELINE VALUE (YEAR)	TARGETS			
		2020	2021	2022	END OF PLAN
Sector Outcome: Income-earning ability increased					
Percentage of youth not in employment or education decreased	23.0 (2015)	17.5-19.5	18.0-20.0	17.0-19.0	17.0-19.0
Subsector Outcome: Employability improved					
Duration of school-to-work transition of college graduates reduced (years)	2.0 ¹⁵ (2008)	None	N/A	0.75-1.0	0.75-1.0
Duration of school-to-work transition of high school graduates reduced (years)	4.0 (2008)	None	N/A	0.75-1.0	0.75-1.0
Duration of school-to-work transition of TESDA graduates reduced (months)	3.0 (2015)	3.5	3.5	3.25	3.25 ¹⁶
Percentage of discouraged workers reduced (%)	12.5 (2014)	11.00	11.5	11.0	11.0 ¹⁷
Unemployment rate of college graduates decreased (%)	7.3 (2016)	7.2-7.5	10.0	8.0	8.0 ¹⁸
Employment rate of TVET graduates increased (%) ¹⁹	66.2 (2016)	72.0	68.86	69.39	69.39

¹⁵ Based on an Asian Development Bank Survey on Filipino Youth Labor Market Experience in 2008. Data on End-of-plan (EOP) targets will be sourced from the Labor Force Survey. Potential discrepancy between baseline value and EOP targets may arise given changes in the source of data reported.

¹⁶ Lower employment demand is anticipated in the near term as a result of global and domestic economic slowdown.

¹⁷ Increase of discouraged workers may be expected given looming global recession and decrease in output growth by end of 2020.

¹⁸ Labor market disruption brought by the pandemic is seen to result in falling labor demand, especially among hard-hit industry sectors in the near term. In addition, postponement of this year's board examinations due to the pandemic may cause delay in college graduates' employability and will affect the employment absorption in the fields requiring professional board passers.

¹⁹ Refers to percentage of TVET graduates for the period that are already employed over the total number of TVET graduates for the same period. 2021-2022 targets were revised based on NTESD Plan.

INDICATOR	BASELINE VALUE (YEAR)	TARGETS			
		2020	2021	2022	END OF PLAN
Percentage of females with advanced degrees employed increased ²⁰	79.4 (2016)	80.0	81.0	82.0	82.0
Labor force participation of women increased (%)	50.1 (2015)	50.5	48.0-50.0	48.5-50.5	48.5-50.5 ²¹
Subsector Outcome: Productivity improved					
Labor productivity in the industry sector increased (% growth) ²²	2.1 ^r (2015)	3.0-4.0	2.5-3.6	4.40-4.65	4.40-4.65
Labor productivity in the service sector increased (% growth) ²²	2.7 ^r (2015)	4.0-5.0	(1.02-0.13)	5.35-5.61	5.35-5.61
Subsector Outcome: Labor mobility and income security enhanced					
Share of employees in precarious work ²³ to total employed (%) reduced	18.9 (2016)	18.1	18.0	17.9	17.9
Share of wage and salary workers in precarious work to total wage and salary workers (%) reduced	30.7 (2016)	28.5	28.4	28.3	28.3

Notes: 2020 targets were retained. 2021-2022 targets for some indicators were adjusted given the impact of the pandemic in the near term.

In light of the current and emerging challenges in the labor market, the government will further strengthen its efforts to raise the quality of human resources and ensure that the current and future workforce will be able to adapt to the changing demands of the labor market. Strategies that will improve the ability of individuals to operate and thrive in a digital environment, while at the same time, ensuring job quality and income security will be pursued. Overall, these are expected to improve people's access to employment opportunities and ensure their employability and productivity, thus, translating to increased income-earning ability and enhanced adaptability of the Filipino workforce.

Improving employability

Ensuring employability of displaced workers, jobseekers, and those in vulnerable sectors calls for

swift and coordinated whole-of-society approach to policy actions. This will be accomplished through the following strategies:

Further advance skills development and retooling through continuing education, training, and digital learning. With the unprecedented disruption in the economy, business operations have been immensely affected, resulting to worker displacement. The government will take an active role in upskilling and reskilling its workforce through comprehensive and coordinated skills development and training programs. Skills retooling programs through flexible and blended training arrangements will be expanded in building skills critical to current and emerging industry demand. For instance, courses and modules, specifically focused on ICT, offered under the TESDA Online Program,

²⁰ Percentage of females with advanced degrees is the proportion of female graduates with post-baccalaureate degree (Masters and PhD) to total working age population of female graduates with post-baccalaureate degree.

²¹ The implementation of distant online learning and blended learning modalities may affect women's labor force participation rate as the need for unpaid domestic care work increases (e.g., child minding, care needs for older persons) in the near term.

²² Adjusted based on revised growth estimates and employment outlook in the near term

²³ Precarious work refers to workers whose nature of employment is short-term or seasonal or casual or those who worked for different employers on day-to-day or week to-week basis.

will be expanded to respond to in-demand skills in the new normal. Targeted training modules will be developed to cater to the needs of youth, displaced workers and repatriated OFWs, new entrants to the labor force, and the vulnerable sector (e.g., informal sector workers, workers in hard-hit industries, casual and gig workers). To facilitate efficient and wider reach of training and retooling assistance, provision of subsidies through issuance of training vouchers to individuals, in partnership with the private sector, through institution-, enterprise-, and community-based, or online modalities is envisioned. Procedures for availing TESDA scholarship programs will also be revisited to improve accessibility and reduce difficulties in application requirements. The Mobile Training Laboratory Program will also be expanded to better serve far-flung areas. Implementation of the *Tulong Trabaho* Fund will be accelerated to help fund such interventions. Meanwhile, the Professional Regulation Commission (PRC) will need to strengthen the Continuing Professional Development (CPD) programs through online-based platforms.

Boost and expand employment facilitation services. The pandemic has amplified the need for comprehensive, well-coordinated, and accessible employment facilitation services that will better connect people to jobs and engage employers and other stakeholders. To this end, capacities of the

Public Employment Service Offices (PESO) in the LGUs will be strengthened. Given the critical role of local governments in the management and implementation of training and employment programs through the PESOs, creating stronger mechanisms to effectively deliver services, boost employment, and generate jobs at the local level is needed (*see Box 10.2*).

Efforts to intensify the institutionalization of PESOs across localities nationwide will be pushed to ensure availability of funds and resources. In particular, it is crucial to have adequate and well-trained staff as well as up-to-date facilities and to keep an updated and expanded database of jobseekers and available jobs that may be accessed by other PESOs nationwide. Moreover, the PESOs will also strengthen the delivery of economic and financial literacy programs for the vulnerable sectors, through intensified partnership with the regional offices of the National Economic and Development Authority (NEDA) and Bangko Sentral ng Pilipinas (BSP). More importantly, firms will be encouraged to hire workers residing in the communities, where they operate, to reduce vulnerability to transport disruptions and community quarantine restrictions. Such practices will also reduce the possibility of virus transmission through cross-LGU mobility.

Box Article 10.2. Improving the Role of LGUs in Employment Facilitation Services

Local governments play an important role in the management and implementation of skills and employment programs through the PESOs. The core services being offered by PESOs in LGUs are mainly on employment referral and placement, counseling/career guidance, and conduct of job fairs and pre-employment seminars. However, the success of PESOs varies highly depending on how a specific LGU implements these services. To realize PESO's key objectives, it is crucial that they continually innovate and find ways to deliver their services that are best suited to their local situation.

Building a good rapport with constituents and having broad and dynamic partnerships with businesses, academe, non-government organizations (e.g., Chambers of Commerce), and other government agencies or LGUs are critical. PESOs should regularly update their database on the labor needs of businesses, especially in emerging industries, and supply of labor. To do the latter, skills mapping in the barangay level needs to be done regularly. PESOs can then organize better designed and targeted skills development programs.

PESOs may also assist unorganized wage employees in forming cooperatives, link microfinance institutions with those with livelihood activities, and develop market linkages for micro, small, and medium enterprises (MSME). PESOs may also link job seekers with PESOs in other LGUs and/or relevant agencies for those aspiring to work abroad.

In Marikina City, the PESO partnered with the LGU Center for Excellence and City Women's Council in coming up with a Labor Market Center, which works as a one-stop shop for all employment-related concerns including training/skills development and wage employment and livelihood facilitation. Meanwhile, in Bulacan, LGUs partnered with local colleges for continuing education and skills development of the workforce.

Amidst challenges, labor market information systems need to keep pace with the dynamic and competitive labor market by enhancing accessibility, expanding coverage, and fostering closer coordination between employers, the academe, and the government. The PhilJobNet, the government's web-based job search, matching, and referral portal, along with the PESO Employment Information System (PEIS) will be enhanced, through intensified promotion among stakeholders and improved collection of data. These platforms will also be expanded to highlight online and home-based job openings. Development of e-recruitment guidelines and intensified advocacy against online illegal recruitment and trafficking will also be pursued.

Strengthen and expand internship, apprenticeship, and dual training programs. A highly-skilled workforce is important to build competitiveness. Yet, the COVID-19 crisis poses great risks for the youth and young workers, as they bear the brunt of the economic and social consequences of the pandemic, which might have far-reaching effect throughout their working lives.²⁴ Thus, there is a need for current internship, apprenticeship, and training programs to be enhanced to respond to the current needs of the government (i.e., contact tracers, profilers, and encoders) and industry. These include: (a) Government Internship Program (GIP); (b) JobStart Philippines program; and (c) apprenticeship, learnership, and dual training programs. Moreover, online modules on life skills training, occupational safety and health, including mental health, productivity, career guidance, and employment coaching will be developed under these programs. The government will likewise forge stronger government-industry-academe linkages to provide quality workplace-based and/or remote and technology-based training opportunities for the youth by designing academic and training curricula that are responsive to the skills needed by the industry and establishing employer-led learning networks. Altogether, these are deemed to improve employment prospects and reduce school-to-work transition among the youth.

Ensure that flexible work arrangements allow members of the workforce to balance their household and work duties. Companies now resort to flexible and remote work arrangements (e.g., flexible schedule, compressed work week, alternative worksite telecommuting), in view of the demands of the new normal. On the one hand, such arrangements may encourage women, who previously opted not to work due to family and household duties, are able to join the labor force. On the other hand, working mothers are likely to be overwhelmed as they juggle household duties (i.e., domestic work and family care) and work in the same physical space. Given this, there is a need to ensure that such flexibility will also guarantee work-life balance, especially among working mothers, to prevent them from opting out of the labor force. Other strategies to increase labor market participation of women include, addressing gender bias and gender role stereotype in basic education curriculum materials and promoting entrepreneurship and advance economic opportunities for women through the use of digital technology.

Improving productivity

Enhance delivery of capacity building for productivity-based incentive schemes and business continuity plans. Technical assistance on enhancing productivity and developing productivity-based incentive schemes, to be spearheaded by the National Wages and Productivity Commission (NWPC), will be delivered using various modes (i.e., virtual and electronic modes) appropriate to various work arrangements, including telecommuting or work from home. The productivity toolbox will be expanded to include the preparation of business continuity plans (BCP).

Ensure safety and health of workers amid intensified adoption of flexible working arrangements. Due to the pandemic, firms have been forced to adopt various forms of flexible and

²⁴ International Labour Organization, ILO monitor: COVID-19 and the World of Work. Fourth edition, May 27, 2020.

alternative working arrangements. However, there is a need to ensure that the flexibility of work will not affect the well-being of workers. The current rules and guidelines on flexible/alternative work arrangements, both in the private and public sectors, as well as the observance of occupational safety and health (OSH), will need to be revisited in light of the new normal. This includes ensuring existing rules and guidelines are responsive, in assuring work-life balance as well as safeguarding health and well-being, given remote work arrangements. Moreover, as some industries require the need for physical reporting (e.g., service-oriented sectors), the provision of PPEs by employers to prevent the spread of COVID-19 and other viruses needs to be institutionalized. Likewise, promoting awareness and expanding coverage of the Employees' Compensation (EC) Program, by including pandemic-related risks as a valid criterion to avail of such program, will be pushed. Meanwhile, guidelines on the provision of hazard pay for workers in the public sector will be reviewed or formulated, if there is none. Protection of Filipinos working overseas, especially the low-skilled workers, can be improved through strengthening bilateral labor agreements with host countries (*see Chapter 21*).

Nurture workplace harmony. In keeping with its firm commitment to ensure conducive workplaces and improve productivity of workers, the government will intensify information dissemination of the recalibrated Labor and Employment Education Services (LEES) of the Department of Labor and Employment (DOLE), which includes labor relations, human relations and productivity, continuing labor education seminars, and labor education for graduating students. This will be undertaken through: (a) developing modules on nurturing workplace harmony in light of the

new normal (i.e., guidelines on alternative/flexible work arrangements [FWA], fostering productivity and occupational safety and health [OSH] in FWAs); (b) using radio and television broadcast, social media, and online platforms; and (c) forging stronger partnership through memoranda of agreement between DOLE-Regional Offices and educational institutions on the use of the DOLE-LEES e-Learning Portal for the conduct of Labor and Employment Education for Graduating Students.

Enhancing labor mobility and income security

Enhance income support and emergency employment. The COVID-19 pandemic has shed light on the importance of robust social safety nets to cushion workers from sudden economic shocks. Apart from wage subsidy programs, the unemployment benefits of the SSS will need to be expanded to assist temporarily laid-off workers. Furthermore, the government will seek to design a more comprehensive unemployment support program that will provide workers more flexibility to search for jobs by improving their skills and capacity as they re-enter the labor market (*see Chapter 11*). Moving forward, financial assistance programs for displaced formal and informal sector workers will be reviewed and strengthened for possible institutionalization.

At the same time, current efforts towards enhancing the implementation of minimum wage policies (i.e., balanced, consultative, and evidence-based approach to minimum wage determination, rationalized number of wage rates, exclusions, and exemptions per region) will be continued to protect vulnerable workers from undue low wages.

Legislative Agenda

The following legislation will be required to support the actions of the executive branch:

Table 10.8 Legislative Agenda to Transform Human Capital Development towards Greater Agility

LEGISLATIVE AGENDA	RATIONALE
Sector Outcome: Nutrition and health outcomes for all improved	
Subsector Outcome: Care at all life stages guaranteed	
Policy on the Prevention of Adolescent Pregnancy	This will facilitate the development of a National Program of Action and Investment Plan for the prevention of teenage pregnancy. The program of action will serve as a national framework for inter-agency and inter-sectoral collaboration at all levels that will address various health, cultural, socioeconomic, and institutional determinants of teenage pregnancy. The policy may be in the form of either an Executive Order or a RA.
Nationwide Firecracker Regulation	This will reduce fireworks-related injury, disability, and death and update law regulating fireworks. Some of the key features of the proposed legislation are: (a) banning of individual/residential use of both legal and illegal firecrackers, except if used as part of a community fireworks display; (b) strengthening the enforcement on the regulation of manufacture, sale, distribution, storage, and use of firecrackers and pyrotechnic devices; and (c) promoting public health and safety from the use of firecrackers and pyrotechnic devices.
Subsector Outcome: Responsive and resilient health system ensured	
Amendment of the law (Presidential Decree 1569) on the Barangay Nutrition Scholar (BNS) Program	The proposed amendment will upgrade the qualification standards, incentives, and benefits and will ensure the security of tenure of BNS. This is essential in the continuing capacity building and sustained delivery of quality frontline nutrition services to the community. Further, this will also ensure that trained and experienced BNS are carried over by succeeding political administrations.
Strengthening the Local Nutrition Program through the creation of plantilla Nutrition Action Officer (NAO) position	This will ensure that the tasks of planning, implementing, and monitoring projects/activities to guarantee adequate food supply, livelihood, health and nutrition caring, and food stability during emergencies, among the most vulnerable population are provided. The full-time NAO will ensure that LGU nutrition policies and programs, as well as national laws on nutrition, are executed to promote good nutrition of the people.
DOH Hospital Bed Capacity and Service Capability Rationalization Act	This aims to rationalize the distribution of capacity and capability of health facilities. Key features of the proposed legislation include: (a) adjustment and approval of the authorized bed capacities and corresponding service capabilities of its retained hospitals; and (b) alignment of all adjustment in bed capacity and service capability of each DOH hospital with the Philippine Health Facility Development Plan.

LEGISLATIVE AGENDA	RATIONALE
Health Facilities and Services Regulation Act	This proposed measure aims to make licensing standards responsive to the needs of the health systems. Specifically, the following will be covered by the proposed measure: (a) grant quasi-judicial powers to the Bureau of Health Facilities and Services under DOH; (b) establish a regional office to enforce regulatory policies and standards; (c) allow for the income retention of the Bureau to enhance its capacity to expand and improve the quality of its services; (d) extend the validity of health facility's initial license to operate to three years; and (e) implement adjusted penalties and revocation of license.
Counterfeit Pharmaceutical Products Prevention Act (Amending the Special Law on Counterfeit Drugs or RA 8203)	This proposed legislation will make the 22-year-old law responsive to the changes in the industry and in anti-counterfeiting technologies. The measure (a) incorporates as economic sabotage (>1M) the illegal manufacture, importation, distribution, sale or offer for sale, or possession of counterfeit pharmaceutical products; (b) includes online service/selling/pharmacy services; (c) updates administrative proceedings; (d) revises penalties; and (e) strengthens the rapid alert system.
Drugs and Medicines Price Regulation Act (Amending the Universally Accessible Cheaper and Quality Medicines Act of 2008 or RA 9502)	The proposed measure aims to: (a) create the Drugs and Medicines Price Regulation Board that will regulate the pricing of any or all drugs enumerated in Section 23 of RA 9502; (b) mandate the display of prices fixed and approved by the Board for drugs and medicines on a clearly printed poster conspicuously placed within the retail outlet; (c) extend the value added tax (VAT) exemption coverage to all essential ethical medicines listed in the Philippine National Formulary; (d) standardize the prescription of all physicians (should be in generic terminology without any specific brand); and (e) designate the Philippine Pharma Procurement, Incorporated as DOH's and PhilHealth's central procurement agency for drugs, medicines, and common medical supplies.
Pandemic Preparedness Act/Health Emergency Act	This intends to strengthen the national and local response and preparedness during health emergencies (e.g., pandemic, epidemic). The proposed measure may institutionalize national and local/regional CDC. It may also cover establishing medical reserve corps for disasters and health emergencies and providing social assistance (i.e., social amelioration) during pandemic.
Amendment of the Magna Carta of Public Health Workers Act	This aims to make the Magna Carta of Public Health Workers more responsive to the needs and rights of health workers. The proposed measure will provide appropriate benefits to public health workers across LGUs, regardless of LGU income classification, to promote equity in benefits/incentives received, among others.
Philippine eHealth/ Telehealth System and Services Act	This measure will establish a National eHealth System that will direct, institutionalize, and regulate the practice of eHealth in the country.
Sector Outcome: Flexible lifelong learning opportunities for all ensured	
Subsector Outcome: Quality, accessible, relevant, and liberating basic education for all achieved	
Legislation on textbook development, printing, and distribution	This legislation aims to ensure timely provision and adequacy of quality textbooks in basic education without compromising the standards set by the DepEd. This would reduce the time it takes for textbooks to be developed, printed, and distributed to schools, with the additional benefit of supporting the local publishing industry.

LEGISLATIVE AGENDA	RATIONALE
Indigenous Peoples' (IP) Education Systems Act	This legislation proposed aims to establish IP-centric educational systems and institutions. Through this proposed law, provision and delivery of education will be in the IP's own languages, in a culturally appropriate manner. The development and implementation of the IP education programs will also consider the special needs, unique histories, indigenous knowledge systems and practices, spirituality, and value systems of the community.
Expansion of government assistance to K to 6 learners in private schools through the Government Assistance to Students and Teachers in Private Education (GASTPE) and expansion of the Teachers' Salary Subsidy (TSS) to elementary and SHS teachers	<p>The proposed amendment on the GASTPE law aims to further expand the coverage of the GASTPE to the elementary level and SHS teachers in private schools in recognition of the complementarity role of private schools in providing basic education to Filipino learners.</p> <p>GASTPE aims to provide education assistance program for students and teachers in private schools under the tuition subsidy to junior high and SHS students, who wish to pursue their studies in private schools, through the Education Service Contracting (ESC) scheme.</p>
Amendment to the Special Education Fund (SEF) provisions in the Local Government Code	The proposed amendment aims to clarify the scope and coverage, tighten the list of eligible expenses chargeable against the SEF, eliminate provisions that are already irrelevant and restate those that are confusing, and strengthen the position of DepEd in the Local School Board (LSB) in decision-making.
Alternative Learning Systems Bill	This proposed bill guarantees support for the expansion and strengthening of the alternative learning system to respond to the needs of out-of-school children, youth, and adults for improved knowledge, values, and life skills and better preparedness for work, higher education, and self-employment. It establishes the Bureau of Alternative Education, which will focus on policy, curriculum, learning program delivery, learning materials, learner assessment, quality assurance, and support systems of the non-formal education system.
<i>Subsector Outcome: Quality of higher and technical education and research for equity and global competitiveness improved</i>	
Bill on the Rationalization and Harmonization of Enterprise-based Training Modalities	This proposed law aims to integrate and harmonize all existing enterprise-based training modalities like apprenticeship, dual training system, on-the-job training, work immersion.
Amendment of the Higher Education Act of 1994 (RA 7722) and Strengthening the CHED	The bill aims to strengthen CHED by incorporating all added mandates (created by 11 new laws passed by Congress since 1994) in a single document. Once passed, it will expand the CHED's mandate to cover sports development, supervision, and regulation of higher education programs offered by local universities and colleges, and internationalization of HEIs, among others.

LEGISLATIVE AGENDA	RATIONALE
<i>Cross-cutting</i>	
ICT in Education Bill	This aims to strengthen the use of ICT in public elementary and high school through establishing computer centers in schools, training of teachers, and digitization of administrative systems.
Flexible Learning System Bill and support for Blended Learning Systems	The proposed legislative measure will allow funding to support and promote flexible learning systems in public and private schools, as well as in HEIs.
Sector Outcome: Income-earning ability increased and adaptability enhanced	
<i>Subsector Outcome: Employability improved</i>	
Amendment to the Apprenticeship Law	This will encourage enterprises to participate in the implementation of apprenticeship programs by enhancing responsiveness to the identified needs of enterprise and prospective apprentices. Specifically, EO 111, s. 1986 that sets the maximum duration of apprenticeship programs must be repealed. Training duration must depend on the complexity of the skills to be learned.
<i>Subsector Outcome: Productivity improved</i>	
Amendment to the Productivity Incentives Act (RA 6971)	This measure seeks to liberalize the restrictive provisions of the RA 6971 to accelerate the adoption of productivity improvement and gainsharing schemes, while (a) making the establishment of productivity incentives committees mandatory in large private business enterprises; (b) reiterating that gainsharing will be contingent on gains from productivity improvement; and (c) easing the requirements for availing tax incentives by business enterprises for granting productivity incentives and grants to employees and workers.
<i>Subsector Outcome: Labor mobility improved</i>	
Amendments to the Labor Code	This will pursue the amendment to the five-day workweek prescribed by the Labor Code, accompanied by more specific guidelines on the implementation of alternative work arrangements for both private and public sector. This will also establish a legal framework on part-time work to increase flexibility for employers while integrating workers' protection.
<i>Subsector Outcome: Income security guaranteed</i>	
Amendments to the Magna Carta of Public Health Workers	A more equitable hazard allowance of public health workers across salary grades will be pursued.
Amendments to the Guidelines and Benefits of EC Program	The guidelines and benefits of the EC Program need to be amended to include compensations for pandemic-related risks at work.

11 Ensuring Food Resiliency and Reducing Vulnerabilities of Filipinos



Ensuring Food Resiliency and Reducing Vulnerabilities of Filipinos

The COVID-19 crisis further reinforced the country's determination to strengthen its social protection (SP) system towards ensuring the resilience, health, and well-being of Filipinos. In the first half of the Plan period, SP programs have contributed considerably to the reduction of vulnerability and poverty. Improvements were largely driven by wider coverage and effective social assistance given to the poor, especially to the extremely poor. Building on this platform and given the vulnerabilities that surfaced during the COVID-19 pandemic, the sector will focus on proactively minimizing Filipinos' exposure to risks and increasing their capacities to manage shocks so that they can continue to achieve their full potential and pursue their aspirations. The proposed initiatives will guarantee that the country's SP system is responsive in keeping the country healthy and resilient as it adjusts to the changes brought about by emergencies and adapts to the new normal.

Assessment and Challenges

The government has improved SP financing and institutional arrangements during the first three years of Plan implementation. The initiatives include, the convergence of government efforts by using the *Listahanan*, approval and adoption of SP Plan 2020-2022, enhancement of the *Pantawid Pamilyang Pilipino Program* (4Ps), and the expansion of Philippine Health Insurance Corporation (PhilHealth) and social pension coverage. Further, landmark legislation and reforms were passed, such as the Universal Health Care (UHC) Act, Mandatory PhilHealth Coverage for All Persons with Disability, 4Ps Act, Social Security Act, 105-Day Expanded Maternity Leave Law, Magna Carta of the Poor, Safe Spaces Act, *Masustansyang Pagkain para sa Batang Pilipino Act*, National Commission of Senior Citizen Act, Community-Based Monitoring System (CBMS) Act, Philippine Identification System (PhilSys) Act,

Bayanihan to Heal as One Act, and the *Bayanihan* to Recover as One Act.

The importance of SP was also demonstrated with the inclusion of measures to protect those most likely to be adversely affected by reforms. The Tax Reform for Acceleration and Inclusion (TRAIN) Law included an Unconditional Cash Transfer (UCT) program to mitigate its possible inflationary impact in low-income households. The Rice Tariffication Law (RTL) contributed to food security and resiliency, especially among low income households, and provided assistance to rice farmers to improve their competitiveness given this new trading regime.

With such initiatives, coverage of the different SP programs has improved: PhilHealth coverage increased from 91 percent in 2016 to 100 percent

in 2019; Social Pension for Indigent Senior Citizens beneficiaries expanded from 1,412,598 in 2016 to 2,690,916 in 2019; and Social Security System (SSS) coverage of the economically active population rose from 34 percent in 2016 to 41 percent in 2019. In 2019, the *Pantawid Pamilya* also started replacing households that exited the program to cover more poor Filipinos.¹ More importantly, SP programs have contributed to poverty reduction. Based on the estimates from the World Bank (WB), the *Pantawid Pamilya* helped reduce poverty incidence and income inequality by 1.3 percentage points (ppts) and 0.6 ppts in 2017² while social insurance programs reduced poverty headcount ratio of the poorest quintile by 1.2 percent in 2016.³ In particular, the enactment of the RTL in 2019 reduced the price of rice and ensured stable and low inflation for low-income families. A study by the National Economic and Development Authority (NEDA) and the International Food Policy Research Institute (IFPRI)⁴ showed that the implementation of the RTL will reduce the number of malnourished children and population at risk of hunger by 2.8 percent and 15.4 percent, respectively, by 2025. However, there are still pressing challenges: (a) the target of zero deaths due to disasters was not met because of limited capacity and limited coherent actions from multisectoral actors in disaster risk management, particularly in addressing underlying vulnerabilities of communities; (b) SSS coverage among economically active population remains low at 41.48 percent due to affordability concerns among informal sector workers; and (c) impairments/health condition and physical and social barriers severely disabled 12 percent of Filipinos 15 years old and above in 2016.⁵

The scale and severity of the COVID-19 crisis brought to the surface many vulnerabilities of Filipinos. The We Recover as One (WRAO) report noted that almost 40 percent of survey respondents claimed that their income declined, and that "... various interpretations about the quarantine imposition held up cargoes and hindered delivery trucks carrying food and other basic items needed by residents of Metro Manila and the rest of Luzon." Compounded with policies that restrict the mobility of individuals (e.g., stoppage of public transportation services) to contain the spread of the virus and build up health system capacity, many individuals and families found it difficult to access food and other goods and services to go to work. In particular, 45 percent of families with senior citizens, persons with disability, and pregnant women had limited access to basic necessities. The Philippine Coalition on the United Nations Convention on the Rights of Disabled Persons also noted that persons with disability may have difficulty getting information on COVID-19 if these were not provided in accessible formats. Furthermore, with mobility restrictions, cases of violence against women and their children (VAWC) become a concern because of the proximity of the abuser to the victim and the disruption of preventive services and support systems.

To help Filipinos manage such shocks, the government issued policies that deferred the payment of obligations such as tax and rent, and provided emergency financial subsidies such as the social amelioration program (SAP) and small business wage subsidies. According to the Philippine Institute for Development Studies (PIDS), these SP initiatives helped curb the impact of the COVID-19 pandemic by preventing about four million Filipinos from slipping into poverty.⁶

¹ 4Ps National Advisory Committee, Resolution No. 43, Institutionalizing replacement policy allowing for continuous replacement of Conditional Cash Transfer (CCT) households, Department of Social Welfare and Development (DSWD), December 13, 2018.

² Pablo Acosta, Jorge Avalos, and Arianna Zapanta, "*Pantawid Pamilya* 2017 Assessment: An Update of the Philippine CCT's Implementation Performance," WB Social Protection Policy Note no. 18, WB, Washington, DC, 2019.

³ Aubrey D. Tabuga and Carlos C. Cabaero, "Towards Inclusive Social Protection Program Coverage in the Philippines: Examining Gender Disparities," Discussion Paper Series No. 2019-11, PIDS, November 2019.

⁴ Nicostrato D. Perez and Angga Pradesha, *Philippine Rice Trade Liberalization: Impacts on agriculture and the economy and alternative policy actions*, NEDA-IFPRI Policy Studies, 2019.

⁵ Philippine Statistics Authority's (PSA) 2016 National Disability Prevalence Survey considers disability as an outcome of the interaction of individuals' impairment/health condition and their physical and social environment.

⁶ Jose Ramon G. Albert, et. al., "Poverty, the Middle Class, and Income Distribution amid COVID-19," Discussion Paper Series No. 2020-22, Philippine Institute for Development Studies, August 2020.

The crisis highlighted inefficiencies in the delivery of SP programs. While generally flexible in responding to shocks and crises, adjustments to SP programs often take time to be implemented. In the case of the SAP, data limitations prevented efficient targeting and provision of assistance, while logistical problems caused delays in certain localities. The Department of Social Welfare and Development (DSWD) was able to immediately distribute SAP grants to *Pantawid Pamilya* beneficiaries with cash cards but they had difficulty distributing grants through physical payments, especially in geographically

isolated and disadvantaged areas (GIDAs), localities with high rate of COVID-19 cases, and conflict-affected areas. Moreover, there were bottlenecks in local government units (LGUs) distribution due to the need to validate the list submitted by the barangays and to respond to grievances among their constituents, and the stringent procedure of local treasurers.⁷ In terms of unemployment benefits, workers who lost their jobs had difficulty getting financial support due to the tedious process of availing the benefit, closure of SSS offices, and limited understanding of the program.

Targets

Strategies under the SP sector of the Philippine Development Plan (PDP) 2017-2022 aim to ensure access to nutritious food even during emergencies, reduce each type of risk, and enable people to manage individual, economic, natural and human-induced disasters, and governance and political risks.

Table 11.1 Updated Targets to Ensure Food Resiliency and Reduce Vulnerabilities of Filipinos

INDICATOR	BASELINE VALUE (YEAR)	TARGETS			
		2020	2021	2022	END OF PLAN
Ensure food resiliency					
Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale	-	-	-	-	-
Severely food insecure	5.12 (2019)	TBD	TBD	0.00	-
Moderately food insecure	39.06 (2019)	TBD	TBD	25.78	-
Mitigate risks faced by vulnerable groups					
Out-of-pocket health spending as percentage of total health expenditure	45.0 (2016)	*	*	TBD	TBD
National Health Insurance Program availment rate (%)	80.52 (2017)	*	*	100	100
Percentage of population covered by social health insurance**	91 (2016)	100	100	100	100

⁷ DSWD. DSWD SAP 1st Tranche Implementation Monitoring and Evaluation Report, May 2020.

INDICATOR	BASELINE VALUE (YEAR)	TARGETS			
		2020	2021	2022	END OF PLAN
Number of eligible senior citizens who received social pension	1,412,598 (2016)	3,796,791	4,107,324	4,550,220	4,550,220
Number of child laborers (in '000)***	1,066 (2017)	0	0	0	0
Proportion of women in especially difficult circumstances reported in DSWD served	100 (355,133 cases served) (2016)	100	100	100	100
Proportion of violence against women cases reported in DSWD served	100 (1,749 cases served) (2016)	100	100	100	100
Proportion of child abuse cases reported in DSWD served	100 (3,857 cases served) (2016)	100	100	100	100
Manage economic risks					
Percentage of economically active population contributing to SSS	34.1 (2016)	41	42	44	44
Percentage of families covered by social insurance****	68.1 (2016)	TBD	TBD	TBD	TBD
Deal with natural hazards and human-induced shocks					
Number of deaths attributed to natural disasters per 100,000 population	0.09 (91 deaths) (2016)	0	0	0	0
Number of deaths attributed to human-induced disasters per 100,000 population	0.200 (207 deaths) (2016)	0	0	0	0
Number of missing persons attributed to natural disasters per 100,000 population	0.03 (29 missing persons) (2016)	0	0	0	0
Number of missing persons attributed to human-induced disasters per 100,000 population	0.017 (18 missing persons) (2016)	0	0	0	0
Number of directly affected persons attributed to natural disasters per 100,000 population	7,144.557 (7,376,237 persons) (2016)	0	0	0	0
Number of directly affected persons attributed to human-induced disasters per 100,000 population	140.036 (144,577 persons) (2016)	0	0	0	0

INDICATOR	BASELINE VALUE (YEAR)	TARGETS			
		2020	2021	2022	END OF PLAN
Percentage of families affected by natural and human-induced disasters provided with assistance	100 (969,470 families) (2016)	100	100	100	100
Percentage of households with damaged houses provided with emergency shelter assistance	100 (261,617 households) (2016)	100	100	100	100
Proportion of emergency loan applications by calamity-affected Government Service Insurance System (GSIS) members and pensioners granted	100 (2016)	100	100	100	100
Achieve universal social protection					
Total government expenditures in SP as percentage to gross domestic product (GDP)	1.7 (2016)	TBD	TBD	3.7	3.7
Share of total government expenditures in SP to the national budget	9.4 (2016)	TBD	TBD	TBD	TBD

* Note that the Responsible Agency (e.g. Department of Health [DOH], PhilHealth) did not provide annual targets for these indicators as data are not available for these years (or only end of plan target was provided by the concerned agencies).

** Coverage rate is the aggregate count of PhilHealth beneficiaries (eligible member and qualified dependents) under formal economy (private, government, household help/*kasambahay*, enterprise owner and family drivers), informal economy (migrant worker, informal sector, self-earning individual and organized group, and others), indigents, sponsored members, senior citizens and lifetime members as a percentage of the total population.

*** Data generated from the Labor Force Survey (LFS) October 2017 Survey Round. It is based on Department of Labor and Employment (DOLE) Department Order (DO) No. 149 Series of 2016 and DO No. 149-A Series of 2017 that enumerate the work that would render a person below 18 years of age to be engaged in child labor. As this data satisfy only a few of the criteria for child labor, it cannot be compared to the results (data) from the 2011 Survey on Children.

**** This refers to the total number of families with at least one member covered by any (one or more) social insurance programs (i.e., SSS, GSIS, PhilHealth, private insurance, others) divided by the number of families covered and not covered by any social insurance.

Strategic Framework

Strategies that reduced the vulnerability of Filipinos and built the capacity of individuals and families to manage and cope with various risks and shocks will be enhanced.

Figure 11.1 Strategic Framework to Ensure Food Resiliency and Reduce Vulnerabilities of Filipinos



Strategies

The government will continue to implement policies and programs that will empower and build the resilience of Filipinos and further reduce poverty and vulnerability. Policies and services will be updated and upgraded to ensure individual and institutional agility in managing shocks and providing timely assistance.

Ensuring food resiliency

This chapter features strategies which ensure people's access to nutritious food even during emergencies. Related food security measures on ensuring the stability of food supply are discussed in Chapters 8 and 20, while initiatives for proper nutrition are found in Chapter 10. The Inter-Agency Task Force (IATF) on Zero Hunger⁸ ensures that these strategies are supported by policies and programs that will end hunger, achieve food security, improve nutrition, and promote sustainable agriculture.

Strengthen efforts to link food demand and supply. Linkages between public institutions and relevant actors involved in food and nutrition security will be strengthened through existing convergence partnerships and multisector platforms such as Enhanced Partnership Against Hunger and Poverty, Early Childhood Care and Development, First 1000 Days, and Scaling Up Nutrition Movement with the aim of fortifying local value chain employment. These will also consider government's efforts that link products and markets, such as the Department of Agriculture's (DA) *Kadiwa ni Ani at Kita* and the Department of Trade and Industry's (DTI) *Negosyo sa Barangay*.

Strengthen the food fortification program. The Department of Health (DOH) in coordination with other concerned agencies such as the National Nutrition Council (NNC), Department

of Science and Technology-Food and Nutrition Research Institute (DOST-FNRI), and the Food and Drug Authority (FDA), among others, will enhance the country's food fortification program, a complementary intervention to micronutrient supplementation, to produce fortified staples and raw materials for use in disasters and safety net programs. This will be pursued through partnership between national and local governments, business networks, and local organizations.

Encourage small-scale planting for the consumption of the households and community. This strategy includes the Plant, Plant, Plant Program of the Department of Agriculture (DA) focusing on available technologies for both urban and rural homes and partnering with institutions to augment food supply in communities and among households. To foster effective backyard gardening and ensure access to healthy food, the DOST and the National Commission on Indigenous Peoples (NCIP) will be engaged to explore and implement not only new technologies but also indigenous knowledge systems and processes.

Fully implement the *Masustansyang Pagkain para sa Batang Pilipino* Act (RA 11037) and provide nutritious food packs to children through the Supplementary Feeding Program and School-Based Feeding Program. RA 11037 institutionalized government-feeding programs⁹ for Filipino children in day care centers, kindergarten, and elementary schools. To address emerging nutrition concerns during emergencies, food supplementation through the Supplementary Feeding Program and School-Based Feeding Program can be enhanced. Instead of hot meals, day care and elementary school students will be provided with nutritious food packs, which may include vegetable noodles (*malunggay/squash/carrots*), iron-fortified rice, and enhanced nutribun, among others. Said food packs will then be

⁸ Executive Order No. 101, s. 2020, Creating an IATF on Zero Hunger, January 10, 2020.

⁹ Supplementary Feeding Program for Day Care Children, School-Based Feeding Program, and Milk Feeding Program.

distributed by the DSWD and the Department of Education (DepEd), in close coordination with the LGUs and other concerned government agencies/entities, using a scheduled grab-and-go system in consideration of the safety of everyone involved.

Facilitate the provision of food and other necessities to vulnerable and high-risk individuals during emergencies.¹⁰ The DSWD and NNC will work with LGUs in ensuring that those who have difficulty accessing food due to risk of infection or difficulty in mobility have sufficient and nutritious food.

Provide designated service time for older persons and other groups highly susceptible to infection. Groceries and drug stores may open earlier and designate the first two hours to older persons, persons with disability, and pregnant women to ensure cleanliness of facilities and avoid exposure to other individuals.

Continue cash-for-work programs. Emergency cash-for-work programs by the DSWD and the Department of Labor and Employment (DOLE) would help provide temporary employment and income to severely affected workers due to COVID-19, even after the community quarantine has been lifted.

Provide wage subsidy. The Employment Recovery Plan of DOLE will continue to help establishments retain their workers amidst temporary closures and adoption of flexible work arrangements. The program will cover small and medium-scale enterprises.

Mitigating risks faced by vulnerable groups

Ensure financial risk protection through improved PhilHealth coverage and benefit packages. With the passage of the UHC Act, all

Filipinos are now automatically covered by the National Health Insurance Program (NHIP) and will have access to a comprehensive set of quality and cost-effective health care services. PhilHealth will develop new or enhance existing health benefit packages as recommended by the Health Technology Assessment process.¹¹ Outpatient benefit packages including diagnostics, laboratory, dental, medicines, and other preventive services will be provided to all Filipinos. PhilHealth should also guarantee the availability of case rate packages for emerging and re-emerging diseases. Moreover, implementation of the No Co-payment Policy, wherein no other fees or expenses will be charged to those who will be admitted to basic or ward accommodations, will be ensured.

Strengthen the information, education, and communication campaign on health and the available insurance and benefits. The DOH will improve health promotion to ensure that all Filipinos are aware of and have access to health information and benefits that they can avail. Targeted risk communications in precise and culturally resonant messages that integrate COVID-19 infection prevention and control will also be developed. Importantly, a cost-effective communication strategy and plan will need to be drawn up and funded adequately. Moreover, broadcast media (i.e., radio and television) and various online platforms including social media, as well as other low-tech modalities for areas with no access to these technologies, will be utilized to inform and increase health awareness of the public. Other agencies and stakeholders, including the DepEd and LGUs, will also be tapped to integrate health literacy in the curricula and in the activities in the community, respectively. These will include key information about the NHIP of PhilHealth, its importance, and benefits, as well as other concerns, such as ensuring mental health amidst the COVID-19 crisis.

¹⁰ These include older persons, immunocompromised individuals, persons with disability, adolescent mothers, children, solo parents, pregnant and lactating mothers, internally displaced persons, and urban poor.

¹¹ DOH and PhilHealth, Implementing Rules and Regulations of the UHC Act (RA 11223). October 10, 2019, Section 34.

Implement a holistic approach in addressing child labor. Aside from initiatives to address poverty and ensure employers' compliance to employment standards, the government as led by the National Council Against Child Labor (NCLC), will also implement specific programs that will strategically help end child labor. These include engaging non-government organizations (NGOs) and community members, addressing the needs of both children and their parents, and gathering and sharing data. Educating parents on child labor through the Family Development Sessions of the 4Ps (under the DSWD) and Parents-Teachers Associations (under the DepEd) will be a central strategy in this endeavor.

In terms of data collection and management, DOLE and DSWD will roll out the child labor registry, which lists all profiled child laborers and the appropriate services for the child and their parents. Aside from coordinating interventions, the registry will also be helpful in monitoring children at risk of engaging in or returning to child labor.

Study the necessity of establishing a governmental body on Filipino families. Many developmental issues such as VAWC primarily concern families and their members. The NEDA Social Development Committee (SDC) may therefore look into the creation of a governmental body that will lead in the development of policies and programs aimed at promoting the well-being of families. Among others, it may work on values formation and prevention of violence among family and household members.

Conduct advocacy programs aimed at preventing the occurrence of VAWC. Venues such as the Family Development Sessions will be useful in providing VAWC education to individuals, especially those from poor families. With this, the Inter-Agency Council on VAWC (IACVAWC) will spearhead behavioral communication and advocacies on gender sensitivity and VAWC for the general public. Here, it is important to fully engage everyone as strategic partners in achieving gender equality and the empowerment of all women and girls.

Implement community-based programs to address VAWC, including the development of a standardized VAWC manual. A standardized VAWC manual of operations/protocol will be developed by the IACVAWC to better assist abused women and children, as well as improve the referral system between the DSWD and the institutions where the cases are being reported. Among others, the document will help improve the functionality of Local Councils for the Protection of Children (LCPC) and the VAW desks and harmonize existing VAWC databases (i.e. Philippine National Police [PNP], DSWD) to ensure that all victims are provided with the needed support services. There is also a need to prioritize the continuity of child-centered services, especially during disasters and emergencies, to avoid disruption of preventive services and support systems. With this, it is important to ensure the availability of 24/7 helplines as well as the adoption of mobile and online platforms for reporting child and women protection issues and accessing government assistance and services.

Increase social pension and expand its coverage. To address the vulnerability of older persons, the amount of the social pension being granted will be further increased. Its coverage will also be broadened to include not only the indigent older persons, but also those who are not receiving any pension. This entails improved coordination among the GSIS, SSS, National Commission of Senior Citizens (NCSC), and DSWD towards smooth sharing of the necessary information to identify and verify beneficiary overlaps. To improve targeting and coverage, a registry of older persons will also be established.

Conduct information campaign on disability. The government, with the leadership of the National Council on Disability Affairs (NCDA), will continue conducting information and education campaigns among stakeholders to improve their understanding of disability, as well as increase people's awareness of the rights of persons with disability. These campaigns should help address the negative attitude and behavior towards persons with disability.

Improve the accessibility of SP services for persons with disability. The members of the NCDA Board will continue their work on addressing the physical and social barriers that prevent persons with disability from accessing services, including SP programs. This includes ensuring the availability of facilities and services (e.g. allied health professionals) in the different localities in the country (*see also Chapter 10 on related health services*). Related strategies are in Chapter 7 (on culture), and Chapter 19 (on the accessibility of infrastructure). Amidst the mobility restriction due to the COVID-19 crisis, services to persons with disability may be expanded to include the provision of information in accessible formats and financial and specialized support, such as free transportation to medical and rehabilitation facilities, income generating activities, and delivery of necessities.

Implement measures to improve access of vulnerable individuals to necessities and support services and protect them from COVID-19. The government, led by the Task Group on Recovery, needs to adopt clear policy guidelines to ensure that high-risk individuals (i.e. older persons and those with serious underlying medical conditions) are protected and have access to food, medicine, and other necessities while the risk of COVID-19 is still high. At the same time, there should be measures to help reduce possible exposure of these vulnerable individuals to the virus.

Ensure equitable access to the COVID-19 vaccine once available. The IATF for Emergency Infectious Diseases Sub-Technical Working Group (IATF-EID-sTWG) on Vaccine Development will continue to spearhead the research and development, testing/trials, regulation, and accreditation of potential COVID-19 vaccines entering the country. The sTWG will likewise explore multiple avenues (i.e., World Health Organization [WHO] Solidarity trials, COVID-19 Vaccines Global Access [COVAX] facility, bilateral or multilateral agreements) to acquire the vaccines. In anticipation, a procurement and distribution plan will be developed to prepare budgetary and logistical requirements, among others, and ensure equitable access nationwide.

Continue the implementation of minimum health standards. The prescribed minimum public health standards in transport, workplaces, and public places will be continuously implemented and monitored by the LGUs and national government agencies in partnership with the private sector to prevent and reduce the spread of COVID-19 as well as ensure the safe re-opening of the economy. Further, the national government agencies (NGAs) need to ensure that the minimum health standards are observed in the delivery of SP projects and services to avoid the spread of COVID-19. (*see PDP Chapter 10 for further discussion on the matter*).

Reach out to Filipinos in GIDAs. Working with the LGUs, the NEDA-SDC Subcommittee on Social Protection (SCSP) will determine and address the barriers that prevent Filipinos, especially those living in GIDAs, from accessing SP programs. With this, the SDC-SCSP shall also identify appropriate assistance measures to be provided to individuals living in GIDAs during pandemic and emergency situations.

Managing economic risks

Broaden SSS coverage and benefits availment. The SSS aims to broaden its coverage by ensuring simple registration, payment, and benefit application processes through physical and online platforms. It will also continue conducting information campaigns and providing programs such the *AlkanSSSy* and *KaltaSSS*, which help workers, especially those in the informal sector, gain SSS coverage. With the increase of income opportunities through online platforms, the government will ensure that those engaging in these platforms have access to health and emergency assistance and SSS benefits, including old-age pension. To facilitate coverage, partnerships will be established between gig economy platforms (i.e. Grab, *Angkas*, Lalamove, FoodPanda, Transportify, among others) and government social security agencies (SSS, PhilHealth, and Employees' Compensation Commission [ECC]). With this, the coverage of the Employment Compensation Program (ECP) may also be expanded.

Enhance people's access to unemployment insurance (UI) and related services. The SSS, in partnership with other relevant agencies, will implement an information drive on UI nationwide. This will draw attention to and increase knowledge on UI benefits, qualification, and availment process. Given the new normal and to ensure timely provision of assistance, the SSS will also fast-track systemic upgrade to allow for digital application and transactions.

Furthermore, the SSS UI will be tightly linked to active labor market policies. The SSS, in partnership with DOLE, will tap the Public Employment Services Office (PESO) and PhilJobNet to facilitate the matching of demand for workers in emerging industries and UI recipients. Simultaneously, upskilling and retooling trainings will be offered by concerned stakeholders, including Technical Education and Skills Development Authority (TESDA), to UI recipients to improve their skills and qualifications given the new normal.

Conduct further studies on UI. To further improve the country's UI system, studies will be conducted to explore the creation of a separate program fund, UI linkage to active labor market policies, optimal benefits (i.e. higher compensation benefit or longer duration of benefit), and the criteria to avail the benefits, especially during pandemic, among others. Furthermore, to ensure financial viability, the proposed reforms to the UI system should be supported by an actuarial study.

Dealing with natural hazards and human-induced shocks

Provide rapid assistance and insurance for farmers and fisherfolk. Concerned agencies, such as the DA and the DSWD, will work closely, in ensuring that impacts of disasters to farmers and fisherfolk are immediately assessed and addressed. Furthermore, the Philippine Crop

Insurance Corporation (PCIC) will continue and expand the provision of insurance for crops, livestock, fisheries, and even non-agricultural assets of farmers and fisherfolk to help them recover during disasters and prevent them from falling into or falling further into poverty (see *PDP Chapter 8 for further discussion on the matter*).

Promote proactive disaster preparedness among individuals. Filipinos will be informed and encouraged to use existing tools, such as the DOST's HazardHunterPH,¹² to understand natural hazards and help mitigate their effects. Information and advocacy campaigns will be intensified, especially in schools, work places, and communities. Fire and earthquake drills will also be conducted in urban and rural areas.

Promote disaster-resilient infrastructure. The Department of Public Works and Highways (DPWH) will conduct an assessment of the structural integrity of existing structures to ensure safety and resilience to natural hazards, particularly during earthquakes. Stringent implementation of policies on the issuance of permits for buildings, especially residential, will also be assessed.

Ensure the safety of disaster victims. To address the challenges faced by Filipinos before, during and after disasters, the National Disaster Risk Reduction and Management Council (NDRRMC) will ensure the provision of safe evacuation and transition houses, which will have women and child-friendly spaces. The DSWD and DOH will also make available appropriate and adequate mental health and psychosocial support services during disasters.

Establish a menu of SP programs to be implemented during disasters and emergencies. To address the responsiveness of SP programs to natural and human-induced disasters, the SDC-SCSP will develop a menu of SP programs which can be readily implemented, upon the occurrence of such events. These programs should be inclusive and

¹² HazardHunterPH is a tool that can be used to generate indicative hazard assessment reports on the user's specified location. It is helpful as a reference of property owners, buyers, land developers, planners, and other stakeholders needing immediate hazard information and assessment. (<https://hazardhunter.georisk.gov.ph/>)

cater to all those who are affected by the shock (i.e., both formal and informal sectors, among others). Doing so, will facilitate easier access of people to SP services in times of disasters and emergencies.

Continue building the capacities of disaster risk reduction and management (DRRM) stakeholders and improve coordination of services. The NDRRMC will coordinate and spearhead information campaigns, trainings, and drills for DRRM stakeholders, as well as the purchase of early warning and emergency devices. There will be emphasis on inclusion to allow for effective participation of community members and population groups in DRRM. These efforts will be supported by data and information through the conduct of disaster and climate vulnerability and risk assessments and the production of hazard maps.

To strengthen institutional response to disasters, the NDRRMC will provide mechanisms for the conduct of post or rapid disaster needs assessment. Coordination between responders and aid organizations will be clearly defined to avoid inefficiencies and to ensure that all disaster victims are provided with support. This entails the production and dissemination of IEC materials, conduct of related orientation seminars, and establishment of communication systems, so that concerned service providers, including NGOs, have a clear understanding of their roles and responsibilities during disasters and emergencies.

Addressing governance and political risks

Integrate safeguards into development interventions and establish funding mechanisms for these safety nets. The NEDA, through various NEDA Board Committees, will see to it that new development interventions in the form of policies, programs, and projects already integrate safeguards that would prevent or mitigate negative impacts on economic sectors and population groups. This requires the identification of the affected population groups prior to the

implementation of development interventions. The NEDA, the Department of Finance (DOF), and the Department of Budget and Management (DBM) will identify funding mechanisms that may be tapped by the NGAs and the LGUs to assist the adversely affected population groups.

Provide persons of concern (POC) with access to protective services. Engagements and partnerships of concerned agencies, such as the Department of Justice (DOJ) and the DSWD will continue to provide POCs with access to protective services. A database management system for the POCs will be developed to efficiently assess and monitor their concerns.

Achieving universal social protection

Develop the SP Code. The NEDA-SCSP will develop the SP Code to aid stakeholders, especially the LGUs, in developing responsive and effective SP programs and projects. This will also remove the duplication of SP interventions among government entities. Likewise, the SP Code will ensure that Filipinos living in GIDAs will have access to SP programs.

Institutionalize the SP Floor. The COVID-19 pandemic highlighted the importance of institutionalizing the SP Floor. It is instrumental in securing access of people to SP services, as well as improving the SP service delivery in the country. Once the SP Floor is finalized, a policy directive will be issued, to officially adopt and enumerate its components, including the roles of the concerned agencies.

Encourage proactive resilience of households, including savings mobilization. Information and education campaign to encourage households to prepare for emergencies will be strengthened, through the financial literacy and advocacy program of the Bangko Sentral ng Pilipinas (BSP), among others. An important element in this strategy is encouraging households to have a bank account so that they can save and improve their resilience in coping with shocks.

Fast-track the implementation of the PhilSys and synchronize the *Listahanan* with PhilSys.

The implementation of PhilSys or the National Identification (ID) system should be fast tracked because it is critical in delivering responsive SP services. The Philippine Statistics Authority (PSA) aims to cover five million low-income household heads by December 2020. Concerned agencies, such as the PSA and the DSWD, will explore linking the Philippine Identification Card (PhilID) to a digital payment system that will allow more efficient transfer of government assistance in times of crisis, pandemics, or disasters. Part of the plan for the registration process is to allow registrants to open a bank account with Land Bank of the Philippines (LANDBANK) where cash transfers can be made.

The *Listahanan* database needs to be synchronized with the PhilSys to include information found in the PhilID, such as the registrant's demographic and biometric information, and the PhilSys Card Number (PCN), among others. This will allow better targeting of SP services.

Create a registry of vulnerable groups and address data constraints.

To implement policies and SP programs in an effective and timely manner, the DSWD, in cooperation with the concerned councils and/or commissions, will develop a registry of vulnerable groups, especially for street children, older persons, persons with disability, and workers in the informal and gig economy, and those affected by development interventions. This initiative will consider integrating data from

the CBMS and other existing registries, and lessons learned from their operation. Said registry will also be configured to be interoperable with the PhilSys.

Digitalize the delivery of SP assistance and services.

The government's SP approach will be updated and upgraded to allow institutional agility, in managing shocks and providing timely assistance. The concerned agencies, such as the DSWD, the DOLE, and the SSS, in coordination with the Department of Information and Communications Technology (DICT), will enhance their systems to make use of available technology (including digital cash transfers, online delivery platforms) in providing services and reaching every Filipino, including those in GIDAs, whenever possible. As mentioned above, government will explore linking the PhilID to a digital payment system that will allow more efficient transfer of government assistance, in times of crisis, pandemics, or disasters. This initiative will be accompanied by enhancements in individuals' technical know-how and improvements in digital infrastructure, especially in GIDAs.

Monitor and evaluate SP policies and programs.

In accordance with the National Evaluation Policy (NEP) framework, SP programs will be regularly assessed and monitored by the SDC-SCSP to ensure that program and project objectives are met. Monitoring and evaluation activities will form part of the annual budget of implementing agencies and LGUs, reports of which will be uploaded to their respective websites to ensure transparency.

Legislative Agenda

To complement the strategies, the following legislative actions will be pursued to achieve universal and transformative SP program for all Filipinos.

Table 11.2 Legislative Agenda to Ensure Food Resiliency and Reduce Vulnerabilities of Filipinos

LEGISLATIVE AGENDA	RATIONALE
Individual Lifecycle Risks	
Philippine Adoption Act for Abandoned and Neglected Children and for Children with Special Needs	The proposed legislation seeks to improve the quality of foster care for abandoned and neglected children, particularly those with special needs.
Anti-Senior Citizen Abuse Act	The bill aims to protect senior citizens from all forms of abuse.
Increasing amount and coverage of Social Pension	This aims to increase the amount of the monthly social pension and expand the coverage of qualified beneficiaries of the social pension.
Environmental and Natural Risks	
Evacuation Center Act	This will establish permanent and resilient (i.e., earthquake and hydrometeorological hazards) evacuation centers with the necessary facilities to avoid the practice of using classrooms as evacuation centers during calamities. Under this bill, evacuation centers should have women, children, persons with disability, and elderly-friendly spaces. It should also be constructed with space that can be used flexibly during emergencies. The NDRRMC will be in charge of identifying which municipalities and cities will be given priority.

12 Building Safe, Resilient, and Sustainable Communities



Building Safe, Resilient, and Sustainable Communities

The urgency to address the growing need for adequate housing in well-planned communities has never been a matter of survival until the country confronted the COVID-19 pandemic. We have seen in various highly-dense communities, the rapid increase of the spread of the virus, given the difficulty to observe safe social distancing, in congested spaces and inadequate access to household water and sanitation. Against this backdrop, the housing and urban development sector continues to pursue building safe,¹ resilient, and sustainable communities towards realizing a safe and healthy Philippines. The sector will operationalize the Building Adequate, Livable, Affordable, and Inclusive Filipino Communities (BALAI) program. BALAI is the multi-stakeholder partnership platform of the Department of Human Settlements and Urban Development (DHSUD) and its attached corporations, with the private sector, local government units (LGUs), and the communities, aimed at expanding access to housing opportunities by accelerating housing production, enhancing housing affordability, especially for low-income groups, and ensuring livability and sustainability of human settlements delivered through direct and indirect assistance.

Assessment and Challenges

There is a paradigm shift from housing production to management of housing, human settlements, and urban development which catalyzed the creation of the DHSUD, consolidating the functions of the Housing and Urban Development Coordinating Council (HUDCC) and the regulatory functions of the Housing and Land Use Regulatory Board (HLURB). The added powers and functions of DHSUD provide an enabling mechanism for better policy and program coordination, reform advocacy, and implementation, especially at the Cabinet level.

The current COVID-19 pandemic has amplified the need to improve the quality of living conditions, especially vulnerable households living in highly-

dense communities. Addressing the enormous housing need has always been challenged by a confluence of structural and transactional factors. These include: (a) institutional bottlenecks, particularly the complex and tedious processing and approval of housing permits, licenses, and clearances; (b) lack of land suitable for socialized housing development especially in urban areas; and (c) low agency budget allocation and utilization.

The emerging health and safety concerns, as the country transitions to the new normal, are expected to slow down housing production, as well as relocation and resettlement activities, given the disruption in production and delivery of

¹ Safeguards families and communities from environmental risks and negative impacts of urbanization, with particular attention to children, women, elderly people, and persons with disability (PWD).

construction materials, limitations in the conduct of social preparation activities, and greater opposition from receiving LGUs, due to fear of infection and additional social services requirement, among others. These concerns also increase the demand to shift to digitalized government transactions on human settlements development, to ensure that processing of housing-related government permits, licenses, and other transactions are not disrupted. There is also a need to address affordability issues considering that both housing developers and

buyers are affected by the pandemic. On the part of developers, production cost (e.g., construction supplies and materials) has increased due to the imposition of construction health protocols and the need for housing redesign to meet public health goals. Buyers, on the other hand, may have lost income and livelihood and may choose to postpone housing investment.

Targets

Table 12.1 shows the updated Plan Results Matrices (RMs) indicators and targets for 2020-2022.

Table 12.1 Updated Plan Targets to Build Safe, Resilient, and Sustainable Communities

INDICATOR	BASELINE VALUE (YEAR)	TARGETS			
		2020	2021	2022	END OF PLAN ²
Percentage of socialized housing units delivered to socialized housing targets (Annual)	54 (2016)	63	68	73	73
Percentage of low-cost housing units delivered to low cost housing targets (Annual)	116.51 (2016)	100	100	100	100
Proportion of LGUs with approved/ updated Comprehensive Land Use Plan (CLUP) increased	27 (2019)	28	30	31	31
Proportion of urban population living in informal settlements decreased (Sustainable Development Goal [SDG] 11.1.1) [*]	3.2 (2015)	2.60	2.47	2.35	2.35
Proportion of families with owned or owner-like possession of housing units (SDG 1.4.1p9)	61.0 (2016)	72.12	74.90	77.68	77.68
Proportion of families with access to secure tenure (SDG 1.4.2p1)	97.0 (2016)	97.84	98.05	98.26	98.26

Note: ^{*}Baseline and annual targets were updated based on the SDG National Targets Validation Workshop on November 28-29, 2018 in Tagaytay City.

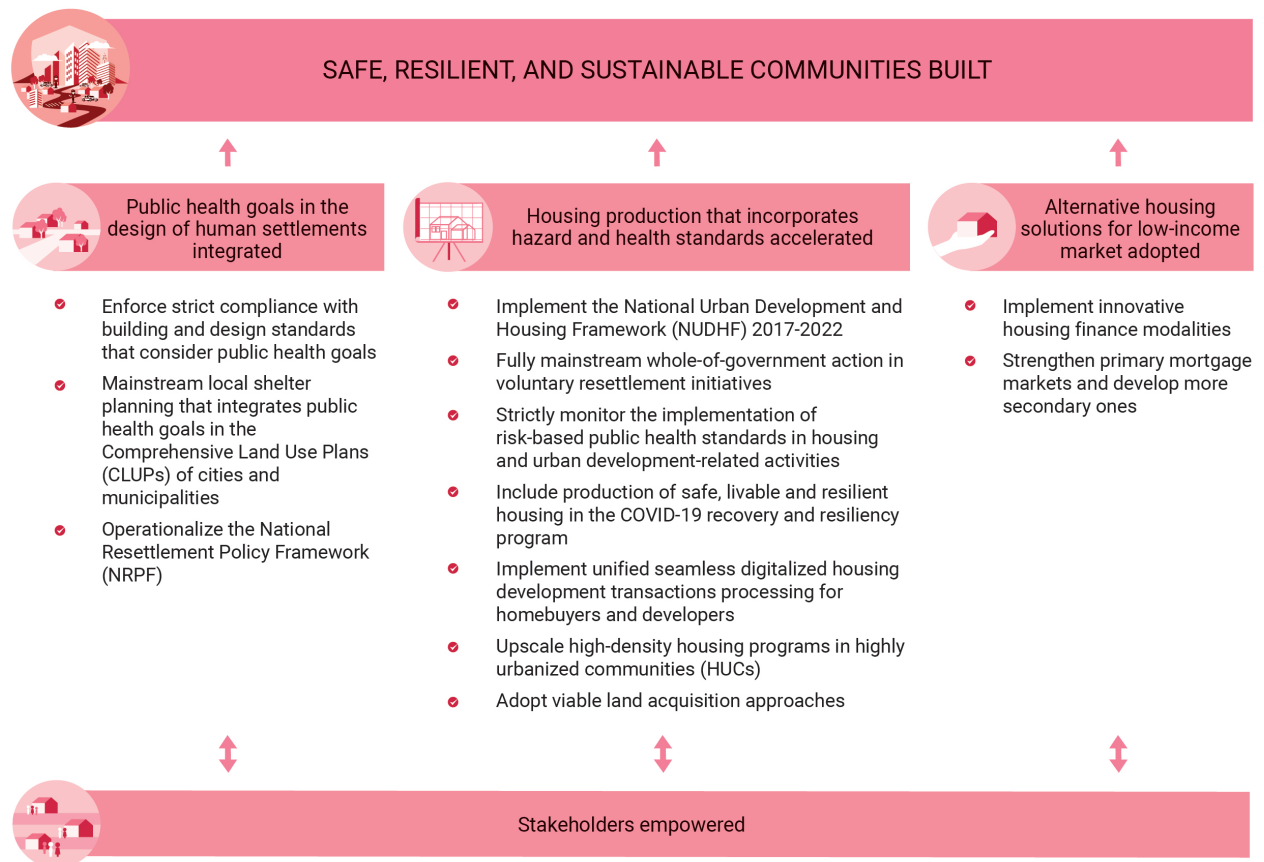
² May either be the cumulative (2017-2022) or incremental target value at the end of the Plan period.

Strategic Framework

The sector will contribute to strengthening the foundations for inclusive and sustainable development by building safe, resilient, and sustainable communities. This chapter refocuses the subsector outcomes on three areas: regulation, production, and financing. First, public health goals in the design of human settlements will be integrated. Second, housing production that

incorporates hazard and health standards will be accelerated. Third, alternative housing solutions for low-income market will be adopted. As a cross-cutting strategy, empowerment of stakeholders (e.g., families, communities, and LGUs, among others) will be intensified towards the attainment of these three subsector outcomes.

Figure 12.1 Strategic Framework to Build Safe, Resilient, and Sustainable Communities



Strategies

Integrating public health goals in the design of human settlements

To ensure livability and sustainability of human settlements, public health goals will need to be considered in building and design standards, as well as shelter planning.

Enforce strict compliance with building and design standards that consider public health goals. Adjustments in housing designs to include minimum health standards, such as the integration of wash areas before entry into the main structure of the housing unit, improving ventilation, and providing ample public and green spaces to low-cost and socialized housing units, which may serve as isolation and quarantine spaces in case of an outbreak, among others, are deemed necessary. Further, a national policy on the housing minimum standard space per person to effectively achieve physical distancing, including the number of rooms per housing unit that would allow for possible areas for quarantine to avoid crowding, will be pursued by the DHSUD, in coordination with the Commission on Population and Development (POPCOM). In light of this, the national government agencies (NGAs) and the LGUs will enforce stricter compliance with building and design standards (i.e., safety, location, structural design, and integrity) by the developers, contractors, and private homebuilders. Due diligence is essential on the part of NGAs and LGUs, in terms of inspection of materials, construction progress monitoring, and certification of project completion, to also ensure satisfactory compliance with building and design standards. An inventory of housing units that do not meet minimum design and health standards will be jointly pursued by DHSUD and Department of the Interior and Local Government (DILG) in coordination with the LGUs.

Mainstream local shelter planning that integrates public health goals in the Comprehensive Land Use Plans (CLUPs) of cities and municipalities.

As a tool to address its public housing provision, the DHSUD shall institutionalize local shelter planning through the Local Shelter Program (LSP) in cities and municipalities as provided in the Local Government Code of 1991 (RA 7160) and the Urban Development and Housing Act (UDHA) of 1992 (RA 7279). To operationalize the LSP, implementing guidelines and strategies that will provide technical assistance to the LGUs, in the formulation of a risk-informed LSP to address resiliency and mitigate impacts of disaster/calamity to households, shall be developed. These will complement the Supplemental Guidelines for Mainstreaming Climate Change Adaptation (CCA) and Disaster Risk Reduction (DRR) in the CLUP, formulated in 2014 by the Housing and Land Use Regulatory Board (HLURB) under Resolution No. 915. The LSP will also utilize POPCOM's Demographic Vulnerabilities Tool (DVT) based on the analysis of four important characteristics of every barangay during a pandemic: (a) the number of houses measuring less than 20 square meters (sqm) in the barangay; (b) the number of individuals living in a house; (c) the number of individuals 60 years of age and older living in houses less than 20 sqm; and (d) the number of individuals 60 years of age and older living alone.

A Local Government Shelter Plan Management and Monitoring System shall be established to ensure efficient delivery of housing, financing, and other housing/shelter interventions to targeted beneficiaries. To incentivize its formulation, an approved LSP will be a requirement in the DHSUD's issuance of the BALAI seal of compliance. Specific health measures include incorporating hazard and health standards in the CLUPs and zoning ordinances. Such measures are aimed at reducing infectious and communicable diseases and enhancing the well-being of the population, especially those who face additional risks due to poverty (i.e., women, children, elderly, and other marginalized groups); prioritizing more open and green spaces and better walkability that allow for social distancing in CLUPs; and exploring the inclusion of an open or public space, which may

be used for isolation and/or quarantine or other similar purposes, in the design of housing and resettlement packages.

Operationalize the National Resettlement Policy Framework (NRPF). The DHSUD will fully implement the NRPF and ensure its integration in the local plans and programs on resettlement. In the next two years, the DHSUD will undertake information dissemination, consultations, and subsequent issuances of policy resolutions towards the implementation of the framework, in line with the localization efforts on the New Urban Agenda (NUA). The NRPF will be promulgated with emphasis on livelihood restoration guided by a socioeconomic restoration framework.

Accelerating housing production that incorporates hazard and health standards

To expand housing opportunities and help in the social and economic recovery from COVID-19, the government will accelerate housing production following urban development and housing framework and incorporating hazard and health standards.

Implement the National Urban Development and Housing Framework (NUDHF) 2017-2022. With lessons from the past two decades, the recent iteration of the NUDHF provides a more cohesive framework with emphasis on making urban spaces greener and more inclusive. It recognizes the role of urbanization in creating more open, connected, and collectively resilient communities. These will be incorporated in CLUPs, zoning ordinances, comprehensive development plans, and LSP, which will guide urbanization that supports equitable growth and promotes uniquely Filipino cities and municipalities. In the next two years, the DHSUD will issue a Department Order (DO) or a Joint Memorandum Circular to mandate concerned NGAs and LGUs to implement and monitor in adherence to the NUDHF.

Fully mainstream whole-of-government action in voluntary resettlement initiatives. To ensure sustainability in the voluntary resettlement initiatives of the government, the *Balik Probinsya, Bagong Pag-asa* (BP2) program will be fully implemented through complementary initiatives while sustaining established community safety and health standards. The program leverages both national and local government resources in ensuring inclusive and balanced urban and rural development, promoting rural prosperity, and complementing initiatives towards attaining resilient and sustainable communities. In the past, the lack of coordination and clear policy guidance among concerned agencies and LGUs hampered the prompt and sustained delivery of auxiliary services such as school buildings, day care centers, health centers, access roads, and livelihood support services. A BP2 Council was created by virtue of Executive Order (EO) No. 114 to serve as the coordinating body for implementation. As majority of families below the poverty threshold live in unplanned communities or in high-risk and danger areas and their lack of financial resources diminishes their capacity to recover from calamities, they are the most vulnerable in times of natural and anthropogenic disasters. A resettlement emergency assistance program (REAP) by the DHSUD will, likewise, be implemented to ensure that families affected by unanticipated events are provided with emergency financial assistance for the construction or rehabilitation of their houses.

Strictly monitor the implementation of risk-based public health standards in housing and urban development-related activities. As part of the health protocols imposed by the government, the DHSUD will monitor the strict implementation of the recently-issued DO No. 2020-005 dated May 14, 2020. The policy provides guidelines for all developers and other entities on the mandatory minimum requirements, as well as inspection and monitoring procedures in the commencement or resumption of their real estate business, development and construction operations, and activities in areas covered by the community quarantine due to COVID-19. The DHSUD and its attached corporations will also issue guidelines to ensure service continuity in housing and auxiliary services delivery during the pandemic.

Include production of safe, livable, and resilient housing in the COVID-19 recovery and resiliency program. The activities of the housing sector are recognized as an economic pump-primer because of the over 80 allied industries involved. Housing activities also contribute to total employment, generating substantial direct employment with an average of 8.3 laborers for three weeks or 124 person-days per housing unit – an average of approximately 5 percent of the country’s total employment. Through continuous production of housing units, more employment opportunities are generated for laborers and other workers involved in the housing industry. Given the economic and social contribution of housing, it is imperative that the government elevate the human settlements and urban development programs, as part of the COVID-19 recovery and resiliency plan, and ensure its continuous delivery of services.

Implement unified seamless digitalized housing development transactions processing for homebuyers and developers. This shall include review of procedures to streamline and digitalize the issuance of housing-related licenses, clearances, and permits in light of COVID-19. Housing one-stop processing centers will be established in every region to fast-track processing of housing-related permits, clearances, and licenses issued by the NGAs and LGUs. The aim is to further streamline the 78 government-related transactions that take about 48 months, on average, in compliant with the Ease of Doing Business and Efficient Government Service Delivery (EODB-EGSD) Act of 2018 (RA 11032) and the Anti Red Tape Act (ARTA) of 2007 (RA 9485).

Upscale high-density housing programs in highly urbanized cities (HUCs). High-density housing solutions such as low-rise (3-5 storeys), medium-rise (6-10 storeys), and high-rise (above 10 storeys) buildings to maximize housing production per unit of land, especially in HUCs, will be expanded. The design of the structures should allow several entry/exit points with adequate health and security protection for its residents. The units should have adequate ventilation and space per person.

Adopt viable land acquisition approaches. Land banking, especially for urban socialized housing, will be scaled up as government prioritizes in- and near- city approaches to resettlement. Likewise, the use of the modalities of usufruct or long-term use of land will be expanded to enhance affordability of socialized and low-cost housing programs due to lower land development cost.

Adopting alternative housing solutions for low-income market

To make housing more affordable for low-income market, alternative housing solutions will be adopted.

Implement innovative housing finance modalities. Recognizing the importance of housing microfinance, as a pro-poor housing finance strategy with the potential to incorporate climate and disaster resilience, the DHSUD will formulate institutional and policy reforms to accelerate housing microfinance as the primary pro-poor housing finance strategy. It will, likewise, identify potential products to provide credit that encourages disaster-resilient housing and support, in post-disaster reconstruction of damaged housing. Alongside this, the implementation of the Tax Reform for Acceleration and Inclusion (TRAIN) Act (RA 10963), which rationalizes the tax incentives system for socialized housing, will develop direct subsidies through housing vouchers, public rental housing, housing microfinance models, and Islamic financing schemes. A feasibility study and pilot implementation of the housing voucher and public rental housing modalities will be pursued by the DHSUD. Partnership with the private sector for incentivized compliance with the Balanced Housing provision under RA 7279, as amended by RA10884, to mobilize funds for public housing of LGUs, as an offshoot of the private developer’s compliance, with these laws shall be continuously explored.

Strengthen primary mortgage markets and develop more secondary ones. The current efforts of Home Development Mutual Fund (Pag-IBIG) under the Affordable Housing Program (AHP) have proven to be effective. Lowering interest rates from 6 percent to 3 percent increased socialized housing loan take-outs from low-income Pag-IBIG members. Sustaining the success of the Modified Pag-IBIG (MP2) program implementation is expected to expand the Pag-IBIG Fund's fiscal space to enable it to finance more loan take-outs and other loan services. On the other hand, to accelerate the rollover of housing funds to provide a sustainable source of financing, the secondary mortgage programs of National Home Mortgage Finance Corporation (NHMFC) need to be further strengthened and broadened, to include housing-related financial assets and not only limited to home mortgages. In addition, marketing of NHMFC's programs need to be intensified. For instance, the *MAginhawang BUhay sa baHAY* (*MABUHAY*) Program, a newly-introduced reverse mortgage program, needs to be widely promoted. The *MABUHAY* allows senior citizens/retirees to convert a portion of their home equity into cash in order to address immediate financial needs.

Stakeholders empowerment

The DHSUD will empower stakeholders by institutionalizing community-led/ driven development of human settlements, as a cross-cutting strategy to ensure sustainability of its program implementation. Specifically, the DHSUD and its attached corporations will provide guidelines for the strict observance of safety standards and health protocols in the conduct of peoples' planning and other community-led/participatory approaches in human settlements development. This is to aid in strengthening community cohesion, improving community competencies for pre- and post-health action activities, and other disaster-related activities, upgrading community areas through site development and provision of infrastructure (e.g., utilities, small roads/access roads, sewage systems), and capacitating community associations such as homeowners associations (HOAs), housing cooperatives, and neighborhood associations, on estate management in a truly participatory and sustained manner.

Legislative Agenda

To strengthen effectiveness of the strategies, the following legislative actions are needed:

Table 12.2 Legislative Agenda to Build Safe, Resilient, and Sustainable Communities

LEGISLATIVE AGENDA	RATIONALE
Chapter Outcome: Safe, resilient, and sustainable communities built	
Passage of the National Land Use Act (NaLUA)	This will establish a national land use framework that will define the indicative priorities for land utilization and allocation across residential, infrastructure, agricultural, and protective uses and integrate efforts, monitor developments related to land use, and evolve policies, regulations and directions of land use planning processes.
Amendments to the NHMFC Charter	The proposed amendments will strengthen and broaden NHMFC's mandate to include the development of a secondary mortgage market for housing-related financial instruments/assets and issuance of housing related asset-backed securities, as well as invest in housing-related financial instruments and other investment vehicles.
Institutionalization of Local Housing Boards	This will provide mandatory creation of Local Housing Boards in every city and first to third class municipality to ensure full cascading of the government housing policies and programs to the local government and ensure the sustained implementation of national and local housing programs.
Strengthened National Housing Authority (NHA) Act	The proposed measure will renew the NHA Charter and strengthen its organizational structure and functions.

PART IV

**INCREASING
GROWTHPOTENTIAL**
*(“PATULOY NA
PAG-UNLAD”)*

13

Reaching for the Demographic Dividend Across All Regions



Reaching for the Demographic Dividend Across All Regions

The Philippines made modest gains in facilitating the demographic transition, specifically in reducing infant and under-five child mortality and women's fertility rates. Key policies and programs have been instituted and strengthened to improve access to adolescent sexual and reproductive health. Legal impediments to the full implementation of Republic Act (RA) No. 10354 or the Responsible Parenthood and Reproductive Health (RPRH) Law have also been addressed along with intensified efforts to meet the demand for family planning services.

In preparing the country's human capital towards harnessing the demographic dividend, major reforms to improve the delivery of nutrition and health services, and transformative education have been put in place in the past three years. However, the socioeconomic impact of the COVID-19 pandemic can reverse these gains. Moving forward, the government will implement programs that will mitigate the pandemic's short- and long-term effects while continuing to address persistent issues on malnutrition, access to health services, and quality of graduates for employment. These will allow the country to still reach the demographic dividend while building a healthy and resilient Philippines.

Assessment and Challenges

Assessment: The elements necessary for accelerating the demographic transition are already being realized. Mortality rates among infants and children under five years old are decreasing. Improved access to modern contraception has also decreased fertility rates. These can be attributed to policies and programs that aim to accelerate the demographic transition along with the improved access to health and education services (e.g., *Kalusugan at Nutrisyon ng Mag-Nanay* Act, RPRH Law, Zero Unmet Need for Family Planning [Executive Order 12 (EO) s. 2017], and the National Program on Population and Family Planning [NPPFP]). Integration of population and development in national and local development

planning and programming was strengthened through capacity-building among local chief executives and planners on the collection of data and conduct of censuses that can serve as inputs to local policy and program formulation. Reforms and investments for improving the quality of human capital to harness the demographic dividend were also prioritized (e.g., *Kalusugan at Nutrisyon ng Mag-Nanay* Act, First 1,000 Days Act, Universal Health Care [UHC] Act, and Universal Access to Quality Tertiary Education Act). The disruptions in health and education services amidst the COVID-19 pandemic pose a threat to these gains and could worsen lagging indicators and outcomes.

Challenges: Regional disparities remain in terms of reaping the demographic dividend due to uneven economic development and access to social services. There is persistent high incidence of adolescent pregnancy, inadequate access to family planning, commodities and services, and poor nutrition outcomes as indicated by continued high levels of stunting and wasting among infants and children under five years old. The COVID-19 pandemic has adversely affected every aspect of society, which could exacerbate these issues, reverse the gains achieved, and necessitate adjustments to cope with the new normal. During the implementation of nationwide community quarantine, sexual and reproductive health services became inaccessible, which could lead to

increased maternal mortality and increased birth rates, including adolescent or early pregnancies.¹ Closure of schools also highlighted the need to set up and adopt new technologies and modalities in delivering education services. In addition, record-high unemployment and underemployment rates due to the pandemic will directly affect the attainment of the demographic dividend. The COVID-19 crisis also exposed gaps in population and demographic databases at the national and local level that would have facilitated the identification of target beneficiaries for government support and for integrating population and development initiatives in the country.

Targets

The following table contains the updated Plan targets in accelerating the demographic transition and maximizing the dividend. Some of these indicators are part of other Philippine Development Plan (PDP) 2017-2022 chapters and are also reflected here given their relevance.

Table 13.1 Updated Plan Targets to Reach for the Demographic Dividend

INDICATOR	BASELINE VALUE (YEAR)	TARGETS			
		2020	2021	2022	END OF PLAN
Age-dependency ratio decreased	57.4 (2016)	Decreasing	Decreasing	Decreasing	Decreasing
Sector Outcome 1: Demographic transition accelerated					
Crude death rate (per 1,000 population) reduced	5.6 (2016)	Decreasing	Decreasing	Decreasing	Decreasing
Maternal mortality ratio (MMR) (per 100,000 live births) decreased	95 (2016)	**	**	108.0	108.0 ²
Under-five mortality rate (per 1,000 live births) decreased	31.0 (2013)	**	**	22.0	22.0

¹ The Department of Health (DOH) projected that the inaccessibility to sexual and reproductive health services can lead to between 47,000 to 253,000 additional unintended pregnancies and around 11,200 to 59,700 additional unsafe abortions for 2020. (DOH Family Planning Team, "Family Planning and the COVID-19 Pandemic," Presentation, 80th Regular Meeting of the of the National Implementation Team for the Responsible Parenthood and Reproductive Health Law, May 28, 2020.) For adolescent pregnancies there might be a projected increase in incidence by 6.3% or about 5,000 more adolescents who will become mothers. (UNFPA, "2020 World Population Day Presentation," July 11, 2020.)

² The COVID-19 pandemic is assumed to have an impact on the access of women to essential sexual and reproductive health services – that may lead to an increase in deaths in 2020. Recalibration of the MMR target for 2022 is viewed to ensure the attainment of the country's 2030 SDG MMR target of 70 per 100,000 livebirths.

INDICATOR	BASELINE VALUE (YEAR)	TARGETS			
		2020	2021	2022	END OF PLAN
Adolescent birth rate (aged 15-19 years) decreased (number of births per 1,000 women in that age group)	57.1 (2013)	**	**	37.0	37.0
Proportion of women who are using modern contraceptive methods increased (%)					
All reproductive age women (15-49 years old)	23.5 (2013)	28.0	29.0	30.0	30.0
All reproductive age women (15-49 years old) who are currently married or in union	37.6 (2013)	**	62.0	65.0	65.0
Proportion of currently married women of reproductive age (15-49 years old) who have unmet need for modern family planning (%) decreased*	35.0 (2013)	**	**	5.0	5.0
Sector Outcome 2: Gains from the demographic dividend maximized					
Life expectancy at birth increased (years)					
Male	69.63 (2015-2020)	**	**	71.3	71.3
Female	75.91 (2015-2020)	**	**	77.5	77.5
Prevalence of stunting among children under five decreased (%)	33.4 (2015)	**	29.8	28.8	28.8
Mean years of schooling increased	10 (2018)	N/A	N/A	11.3	11.3
Proportion on learners achieving at nearly proficient in National Achievement Test (NAT) increased (%)					
Grade 6	16.0 (2018)	26.0	34.0	44.0	44.0
Grade 10	34.0 (2018)	43.0	52.0	61.0	61.0
Grade 12	14 (2018)	13.0	19.0	28.0	28.0
Proportion of learners completing levels of education (completion rate) increased (%)					
Kinder to Grade 6	97.0 (2019)	97.0	97.0	98.0	98.0
Grade 7 to 12	77.0 (2019)	82.0	83.0	84.0	84.0
Female drop-out rate (school leaver) decreased (%)					
Junior High School	4.43 (2016)	Decreasing	Decreasing	Decreasing	Decreasing

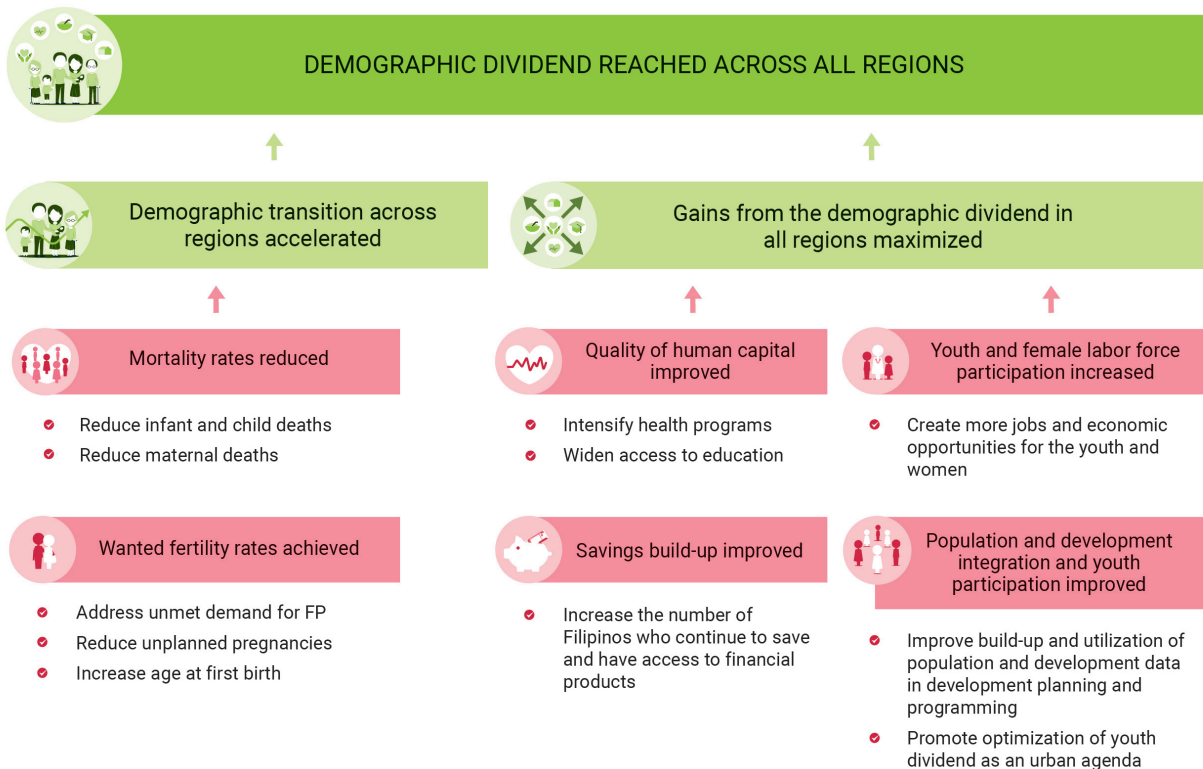
INDICATOR	BASELINE VALUE (YEAR)	TARGETS			
		2020	2021	2022	END OF PLAN
Senior High School	2.89 (2018)	Decreasing	Decreasing	Decreasing	Decreasing
Certification rate of Technical and Vocational Education and Training (TVET) graduates (15-24 years old) increased (%)	91.3 (2016)	86.0	92.0	92.0	92.0
Percentage of youth not in employment, education or training (NEET) decreased (%)	23.0 (2015)	17.5-19.5	18.0 – 20.0	17.0 – 19.0	17.0 – 19.0
Labor force participation rate of women increased (%)	50.1 (2015)	50.5	48.0 – 50.0	48.5 – 50.5	48.5 – 50.5

[†] Computed as unmet need for modern family planning plus traditional contraceptive use.

^{**} Responsible Agencies (e.g. Department of Health [DOH], Commission on Population and Development [POPCOM], and Department of Education [DepEd]) did not provide annual targets for these indicators as data were not available for these years.

Strategic Framework

Figure 13.1 Strategic Framework to Reach for the Demographic Dividend



Strategies

With key reforms and policies instituted, full and intensified implementation of strategic interventions will be pursued to enable all regions to reach the demographic dividend. The focus will be on reducing adolescent pregnancy and addressing unmet demand for family planning among couples and individuals. Efforts to prepare the country's human capital will likewise be sustained along with supportive strategies for improving savings build-up and ensuring the integration of population and demographic factors in development planning and programming. Specific strategies and programs will be fast-tracked and prioritized in regions that have yet to experience the demographic transition necessary for achieving the demographic dividend.

Accelerating demographic transition across regions

Reducing mortality rates

Universal healthcare will be pursued with the implementation of the UHC Act to maintain the downward trend in mortality rates, particularly among neonates, infants, and children under five years old. This will be complemented by the provision of appropriate nutrition and health services for the first 1,000 days of life which includes appropriate care for mothers during pregnancy, labor, and childbirth, essential care for the newborn, optimal infant and young child care and nutrition, immunization, and vitamin supplementation for children, among others. As mandated by the UHC Act, local health systems will be strengthened, specifically the primary care provider networks. There will be improved integration of province- and city- wide health systems and networks under the stewardship of the provincial and city health boards, which will manage the special health fund. Adequate local investment to improve access to quality health services and resilience to any threats and health emergencies will also be provided.

Achieving wanted fertility rates

Population management and reproductive health policies and programs will be strengthened to assist couples and individuals achieve their desired number of children (wanted fertility rate) within the context of responsible parenthood and informed choice. These include the intensified implementation of the NPPFP, which involves collaborative management between the Department of Health [DOH] and the Commission on Population and Development [POPCOM] and coordinated efforts among partner government agencies (e.g., DepED, Department of the Interior and Local Government [DILG], etc.). Strengthened participation of local government units (LGUs) and expanded partnerships with civil society organizations (CSOs) will be pursued. Development partners and the private sector will also be engaged to allow for effective and efficient delivery of quality reproductive health and family planning commodities and services.

The following are the specific strategies to achieve wanted fertility rates:

Intensify demand generation and advocacy activities. A nationwide age-group focused multimedia campaign will be pursued by the DOH and POPCOM to raise the level of awareness and knowledge on the importance and benefits of family planning – from a health intervention to a means to improve family outcomes. This entails the development of a comprehensive and inclusive health promotion and communication plan for family planning. Market-segmented demand-generation strategies at the national and subnational levels will be implemented, including hospital-, facility-, and community- based activities, in coordination with the LGUs. To further widen the reach of these activities while adhering to new normal protocols, interactive forms of communication (e.g., telephone hotlines and online platforms) will be employed to provide adolescent sexual and reproductive health information and counseling. Adolescent sexual and reproductive health and family planning (RP/

FP) information will likewise be continuously incorporated in relevant programs and activities, such as pre-marriage orientation and counseling, *Pantawid Pamilyang Pilipino Program (4Ps)* Family Development Sessions, and other programs for employees or RP/FP in the workplace conducted by the Department of Labor and Employment (DOLE) and the Civil Service Commission (CSC), among others.

Strengthen provision of family planning services, adolescent sexual and reproductive health commodities and services. To match the demand for RP/FP services, accessibility and availability of commodities and services will be expanded. Areas and populations with high unmet demand for such commodities and services will be prioritized. Appropriate health personnel and facilities within a functioning healthcare provider network to provide services will be made available to all. Family planning logistics management will also be strengthened in all public service delivery points through interoperable commodities tracking system across national and local facilities. In times of emergencies and other disasters, the Minimum Initial Service Package (MISP)³ for sexual and reproductive health services will be provided. Postpartum family planning and family planning outreach missions and counseling services will also be intensified.

The participation of LGUs, specifically those with high incidence of unplanned pregnancies, is key in the implementation of these strategies. As such, there will be continued capacity building of local stakeholders specifically for local chief executives, local health officers, and local health service providers. Community volunteers, local government health workers, and private sector providers will be capacitated in delivering family planning and reproductive health services (i.e., Family Planning Competency-based Training for health providers). Local chief executives will also be provided with leadership and governance capability-building programs for health that can improve local health systems and make them more responsive to the health needs of their constituency.

Provide appropriate and innovative services, including family planning, sexual, and reproductive health for adolescents and the youth.

The high incidence of adolescent pregnancy is a major concern that affects the country's population growth and human capital development (e.g., poor health condition and nutritional status for mothers and infants, poor education outcomes, etc.). Hence, to prevent unplanned repeat pregnancies, age-appropriate adolescent sexual and reproductive health services, including family planning, will be provided to sexually active adolescents and those who have already given birth. Social determinants of adolescent pregnancy will be given attention by identifying and addressing contextual factors that influence early coitus and pregnancy. The focus will be on ensuring the full implementation of the Comprehensive Sexual Education (CSE), in line with the RPRH Law. This includes the provision of appropriate learning materials and modules, continuous capacity-building of adult partners (i.e., teachers, parents/guardians, and CSOs), and the creation of a CSE parent education module to be introduced in Parent-Teacher Association meetings. Adolescent-friendly health service packages will also be developed to address the age group's unique needs in terms of correct information and access to adolescent sexual and reproductive health services, including human immunodeficiency viruses (HIV). These activities will be implemented along with the establishment and sustainability of teen centers and adolescent-friendly facilities or spaces in LGUs and schools, and developmental activities for the youth (e.g., sports, socialization, volunteerism, etc.). These will be recalibrated and temporarily moved online during the COVID-19 pandemic. Innovative and interactive forms of communication strategies to reach the youth will also be employed, such as the use of social media and other online media platforms, cellphone applications, and call or text hotlines. Youth-oriented TV and other media programs will be developed to reach the youth and encourage them to make productive use of their time. To this end, coordinated efforts among concerned government agencies will be pursued, including the mobilization of and capacity-building

³ The MISP covers services for safe motherhood, family planning, sexually transmitted infections (STI) and HIV/acquired immunodeficiency syndrome (AIDS), and gender-based violence per DOH Administrative Order 2016-0005.

for the *Sangguniang Kabataan* (youth council) to promote adolescent sexual and reproductive health and youth development programs among their constituency.

Maximizing gains from the demographic dividend in all regions

Optimizing the increasing labor force for more productive economic output requires quality human resources. Thus, it entails the improvement of health and nutrition, education, and total well-being of the human capital. Labor force participation and employment opportunities in all regions will be enhanced, focusing on the youth and women, towards countryside development. Savings rates among households will also be increased through expanded access to financial products. Finally, to ensure that the demographic transition will be planned for, there will be continuous integration of population and development, along with health and environment aspects, in the development planning and programming at the national and local levels.

Improving quality of human capital

Intensify health programs and widen access to education. To improve the quality of human capital, the two-fold strategy of enhancing health, nutrition, and education outcomes needs to be sustained. For health and nutrition outcomes, the focus will be on providing maternal, newborn, and child health services, and school and community nutrition programs. Health and nutrition interventions for mothers, infants, and young children will be expanded, in line with the implementation of the First 1,000 Days Law. Reforms in the country's healthcare system will be pursued with the implementation of the UHC Law and the introduction of innovative measures

to make it more resilient and accessible. These measures include wider use of telehealth and improvement of epidemiological and surveillance capacities to respond to disasters and pandemics (*see Chapter 10*).

A healthy and well-nourished population is not enough to drive productivity – there is also a need to cultivate an educated and competitive labor force. A key strategy will be strengthening early childhood care and development programs, in line with the Global Nurturing Care Framework through early stimulation and early intervention from birth to three years old to prepare them for basic education. Basic education programs will be inclusive for vulnerable groups and those not covered by formal education through the Alternative Learning System. Activities such as the updating of higher education curriculum and the development of new programs (e.g., data science, nanotechnology, machine learning, green/renewable energy engineering, etc.) will be initiated to increase responsiveness to the demands of the Fourth Industrial Revolution (FIRe). The use of flexible learning options⁴ will be expanded and institutionalized to reach more Filipino learners and to reduce contact and COVID-19 transmission (*see Chapter 10*).

Increasing youth and female labor force participation

There are already potentials for growth following the possible demographic transition but these may be irrelevant if the population seeking employment cannot be productively employed.⁵ Therefore, the following strategies will be pursued:

Create more jobs and economic opportunities for the youth and women. As the working-age population is expected to increase, especially the youngest group, they will be capacitated and provided access to productive employment. To ease the youth's transition from school to

⁴ Flexible learning options include open distance learning, blended learning, homeschooling, television- and radio-based instruction, and satellites for off-grid areas.

⁵ Michael R.M. Abrigo, et al., "Are We Missing Out on the Demographic Dividend? Trends and Prospects," Discussion Paper Series No. 2018-43, Philippine Institute for Development Studies, December 2018.

work – internships, apprenticeships, and dual-training programs will be strengthened and expanded. Stronger government-industry-academe linkage will be forged and sustained to achieve these. Employment facilitation for this age cohort will also be improved by providing assistance such as coaching, career advocacy, and counseling. These will be offered through online platforms to make it accessible during the pandemic. Promoting the use of existing labor market programs including technology-based mechanisms, such as the PhilJobNet, can also help in their employment. Upon employment, their productivity can be further improved by building and strengthening employee and enterprise capacities. Health and safety in the workplace will also be promoted by crafting support mechanisms to address psychosocial risks and work-related stress and providing reproductive health and modern family planning services to workers (*see Chapter 10*).

Aside from the youth, specific focus will also be given to women's participation and retention in the labor force, which is only 47.6 percent of all women of working age in 2019. Female labor force participation will be increased by intensifying monitoring and ensuring compliance of corporations to laws, policies, and programs that foster women's participation and retention in the workforce (e.g., Expanded Maternity Leave Act and the Family Welfare Program). Women's access to formal employment opportunities will also be advanced, including entrepreneurship through e-commerce. Flexible work arrangements such as compressed workweek and alternative worksites will likewise be explored. There will also be a continuous push for affordable and accessible childcare support mechanisms like daycare and child-minding facilities and services (*see Chapter 10*).

Improving savings build-up

The government will provide effective access to a wide range of financial products and services for

all. These include the provision of products and services that will support savings build-up through access to savings, checking, and current accounts, pensions, and youth micro-deposits.⁶ Widespread adoption of these formal financial services will be pushed through the use of digital payments that will make transaction accounts relevant, valuable, and inclusive. This will be complemented by consumer empowerment through digital financial literacy, among others. During the pandemic, online courses, webinars, and e-conferences will be employed to improve the population's economic and financial literacy (*see Chapter 15*).

Improving population and development integration and youth participation

Integration of population factors in development initiatives, planning, and programming will be pursued through various channels – specifically in localizing and teaching population and development concepts (including the demographic dividend) to local chief executives. There will be continuous inter-agency collaboration for synergized implementation of key strategies identified in the PDP 2017-2022 towards achieving the demographic dividend. Various support, such as the provision of capacity building and mentoring, will also be extended to national government agencies and LGUs in integrating population and development in their sectoral and local development plans. Sustainable development will be pursued through an integrated population, health and nutrition, and environment approach in carrying out initiatives for reaping the demographic dividend (*see Chapter 20*).

New methods of collecting population data in the LGUs will be identified and sustained. For example, a harmonized and interoperable Local Migration and Information System will be institutionalized, maintained, and utilized for planning and programming, especially in urban areas. The LGUs will also be supported in the collection of population and development-related data through the Community-Based Monitoring

⁶ National Strategy for Financial Inclusion

System (CBMS)⁷ and other local data collection mechanisms. These mechanisms will provide local-level data that will guide the implementation of national programs targeted at developing LGUs (e.g., *Balik Probinsya, Bagong Pag-asa* [BP2] Program). These will also allow the LGUs to facilitate the formulation of more effective and targeted local plans, policies, and programs and adequately respond to shocks and disasters, such as pandemics.

Policies and programs that will drive countryside development will be pursued to allow all regions to maximize the gains from the demographic dividend. The BP2 Program will be implemented to promote balanced urban and regional development. It aims to incentivize reverse migration such that people from megacities will move back to the rural areas (see Chapter 3). To ensure that these areas will complete the demographic transition and maximize the possible dividends, the necessary social services, livelihood opportunities, market and value chain development, and human resource development will be set in place. These changes along with new resource needs will be reflected in the participating LGUs' local development plans.

The integrated Population-Health-Environment (PHE) approach in community projects will be promoted and supported during the pandemic, when a lot of Filipinos have lost their jobs and most are returning to their places of origin. The PHE is an integrated approach in community development that acknowledges the connections between families, their health, and the environment. The population component focuses on giving access to reproductive health and family planning information and services to men and women of reproductive age. The health aspect involves provision of quality health services, child health and nutrition, water, and sanitation; while the environment component

promotes protected areas and biodiversity conservation through watershed management, natural resource management, and sustainable agriculture. Integrated PHE projects implemented in the past proved to be cost-effective, high impact, and have contributed to sustainable development.⁸

As the country moves towards a transition that will be characterized by a “youth bulge,” data will be made available and accessible for crafting the most relevant, appropriate, and effective policies and programs for this age group. Their active, meaningful, and holistic participation in society will also be strengthened by involving them in the conceptualization and implementation of programs and policies across the following sectors: (a) health; (b) education; (c) economic empowerment; (d) social inclusion and equity; (e) peace-building and security, (f) governance, (g) citizenship; (g) environment; and (h) global mobility.⁹ Young people represent a valuable resource and network during crises and public health emergencies. With the right information and training, they can be mobilized to assist in government response – in the case of pandemics, to help break the chain of infection.¹⁰

⁷ Per the CBMS Act of 2018 (RA 11315).

⁸ Population Action International, *Integrated PHE More than the Sum of its Parts*, 2014.

⁹ National Youth Commission, *Philippine Youth Development Plan 2017-2022*. 2017.

¹⁰ United Nations Population Fund (UNFPA), *Adolescents and Young People & COVID-19*, March 2020; UNFPA, “COVID-19 Preparedness and Response,” UNFPA Interim Technical Brief, March 23, 2020.

Legislative Agenda

Table 13.2 Legislative Agenda to Reach for the Demographic Dividend

LEGISLATIVE AGENDA	RATIONALE
Institutionalization of Local Population and Development Policy	This will provide the establishment and operation of population offices to allow effective implementation of population management strategies and measures at the local level.
Prevention of Adolescent Pregnancy	This will facilitate the development of a National Program of Action and Investment Plan for the prevention of teenage pregnancy. The program of action will serve as a national framework for inter-agency and inter-sectoral collaboration at all levels to address the various health, cultural, socioeconomic, and institutional determinants of teenage pregnancy. The policy may be issued in the form of either an EO or a RA.

14 Vigorously Advancing Science, Technology, and Innovation



Vigorously Advancing Science, Technology, and Innovation

The Science, Technology, and Innovation (STI) sector has already been faced with issues that have prevented it from reaching its full potential even before the COVID-19 pandemic. Nonetheless, several reforms to drive the STI sector towards greater advancement were instituted, as a result of the increased collaboration of STI stakeholders. Among these are the Philippine Innovation Act, Philippine Startup Act, Philippine Space Act, and the *Balik Scientist Act*.

With the emergence of COVID-19, there is a need to advance STI that contributes to the attainment of a healthy and resilient Philippines. This will include the rollout of technologies that will help address the pandemic. Moreover, the procurement process of STI programs, projects, and activities (PPAs) will be reviewed and refined for timely implementation and greater impact. Various government support services for startups and micro, small, and medium enterprises (MSMEs) will also be ramped up to help them become more innovative and resilient in times of crisis. The establishment of the National Innovation Council (NIC), which is seen to guide the country towards long-term STI development, will also be fast-tracked.

Assessment and Challenges

Assessment. The linkages among the players in the STI ecosystem remain limited despite some significant strengthening of collaboration among the government, academe, and industry in the past year. Furthermore, the problem of slow commercialization of outputs of STI activities and its underutilization persist. This may be partly due to the absence of a vibrant intellectual property (IP) culture brought about by issues in IP ownership, lack of a legally-sanctioned payment mechanism for financial contributions and familiarity on

legal mechanisms, costly development of IPs, long processing time of IPs, among others. Other challenges include inadequate research and development (R&D) infrastructure, especially in the regions, and slow implementation of STI projects, due to procurement concerns and complex administrative requirements.

The country also continued to underinvest in R&D¹ and there is also low level of awareness on the results of R&D activities and the government's support

¹ Based on the latest available data from the Department of Science and Technology - Planning and Evaluation Service (DOST-PES) (as of January 2019), the Philippines' overall R&D expenditure slightly grew to 0.16 percent of Gross Domestic Product (GDP) in 2015 from 0.14 percent in 2013. However, this still reflects low R&D expenditure relative to the country's Association of Southeast Asian Nations (ASEAN) peers. This is also way below the 1 percent R&D spending share to GDP benchmark for developing countries recommended by the United Nations Educational, Scientific, and Cultural Organization (UNESCO).

mechanisms to help firms become more innovative. Information dissemination campaigns, particularly on available technologies, remain inadequate and fragmented.² With these, many sectors still do not recognize, appreciate, and understand the use of technology and science-based information in their daily activities, which is exacerbated by the dwindling interest in science among the youth, inaccessible scientific information, and the lack of a conducive environment to develop an STI culture.

Based on the World Economic Forum (WEF) Readiness for the Future of Production Report 2018, the Philippines is not yet prepared to manage the Fourth Industrial Revolution (FIRE), as manifested in its weak performance across the drivers of production, which include technology and innovation, human capital, global trade and investment, institutional framework, sustainable resources, and demand environment, among others.³ For instance, the number of the country's researchers for every one million population declined to 200 in 2015 from 270 in 2013. This is also lower than the United Nations Educational, Scientific, and Cultural Organization (UNESCO) norm of 380 per million population and the East Asia and the Pacific average of 1,020 researchers per million population. In monitoring the performance of the STI ecosystem, the existing data on STI are still not enough to keep track and monitor the sector's progress and performance.

Challenges. The adverse spillovers of the prolonged pandemic to the economic sector could bring about a reduction of available resources for STI since the government will now be more focused on addressing the most immediate concerns. However, this is also the opportune time to further strengthen

and provide more resources to STI, as science-based methods and solutions will be needed more than ever in the new normal to curtail, mitigate, and respond to emerging challenges and potential catastrophes whether man-made or natural. The health sector, in particular, will be among the major gainers in this advancement of the sciences in the country.

There will be increased interest in using advances in biology and medical science in the new normal. Similar to the development of COVID-19 testing kits by local scientists, there will be greater efforts to find ways to manage pandemic situations via STI. Among these are means by which mass testing can be facilitated, including the design and manufacture of medical equipment that can aid in the treatment of patients, such as ventilators, among others. Moreover, the demand for health-related technologies (i.e., sanitation booths, contact-tracing applications, and other researches related to the treatment or response to the pandemic) is seen to increase. As companies, schools, and government agencies implement work from home arrangements, the use of digital technology will rise significantly. In addition, online business transactions and digital payments will increasingly become a necessity rather than convenience. All these need to be supported by a reliable digital infrastructure system with strong cybersecurity protection. In the production sector, there will be increased demand for automation and digitalization to supplement manual labor in the immediate term. Over the medium term, automated and digitalized processes may substitute for labor.

² Fatima Lourdes E. Del Prado and Maureen Ann D. Rosellon, "Technology and Knowledge Transfers in Production Networks: Case Study on Philippine Food Manufacturing Firms," Discussion Paper Series No. 2017-08, Philippine Institute for Development Studies (PIDS), March 2017.

³ As the study defined, "production" involves a broad spectrum of economic activities related to manufacturing products and goods. A full end-to-end appraisal of what it entails reveals the following sequence: Design-Source-Manufacture-Assemble-Distribute-Service-End of Use-Cycle. On the other hand, "readiness" is generally regarded as the ability to capitalize on future production opportunities, mitigate risks and challenges, and be resilient and agile in responding to unknown future shocks.

Targets

Table 14.1 shows the indicators and medium-term targets for each major outcome under this chapter. However, these indicators are limited only to those that have available data. The increase in STI application in agriculture, industry, services, and health sectors will be measured based on the increase in the expenditure and in the number of intellectual property products that have been registered and filed. In the same way, the investments in STI-based startups, enterprises, and spin-offs will be assessed based on the World Intellectual Property Organization (WIPO) - Investment Index percentile rank of the country and the number of technology business incubators (TBI) graduates and innovation hubs (e.g., TBIs, innovation centers, niche centers, etc.) established. The creative capacity for knowledge and technology

generation, acquisition, and adoption will be gauged based on the country's WIPO - Knowledge and Technology Outputs percentile rank of the country, R&D expenditure as a proportion of gross domestic product (GDP), number of researchers per million population, number of Science, Technology, Engineering, and Mathematics (STEM) enrollees and graduates in higher education institutes (HEIs), and the number of *Balik* Scientists engaged. Likewise, the strength of the open collaboration among actors in the STI ecosystem will be determined based on the WIPO University-Industry Collaboration percentile rank and the number of collaborations among the HEIs, industries, and the government.

Table 14.1 Updated Plan Targets to Vigorously Advance Science, Technology, and Innovation

INDICATOR	BASELINE VALUE (YEAR)	TARGETS			
		2020	2021	2022	END OF PLAN
Sector Outcome 1: Scale-up technology adoption					
Subsector Outcome: STI application in agriculture, industry, services, and health sectors increased					
Proportion of intellectual property products expenditures to GDP increased (%) ^{b/}	0.46 (2016)	Increasing	Increasing	Increasing	Increasing
Number of Filipino patents granted increased (incremental) ^{a/}	30 (2016)	38 ^{**}	30 ^{***}	38 ^{***}	38 ^{***}
Number of Filipino utility models registered increased (incremental) ^{a/}	552 (2016)	727 ^{**}	584 ^{***}	750 ^{***}	750 ^{***}
Number of Filipino industrial designs registered increased (incremental) ^{a/}	508 (2016)	627 ^{**}	494 ^{***}	622 ^{***}	622 ^{***}
Number of Filipino patents filed increased ^{b/}	245 (2016)	348 ^{**}	353 ^{***}	394 ^{***}	394 ^{***}
Number of Filipino utility models filed increased ^{b/}	1,100 (2016)	1,862 ^{**}	1,380 ^{***}	1,848 ^{***}	1,848 ^{***}
Number of Filipino industrial designs filed increased ^{b/}	959 (2016)	910 ^{**}	675 ^{***}	873 ^{***}	873 ^{***}
Number of Filipino patents filed under Patent Cooperation Treaty (PCT) increased ^{b/}	2 (2018)	3	3	4	4

INDICATOR	BASELINE VALUE (YEAR)	TARGETS			
		2020	2021	2022	END OF PLAN
Subsector Outcome: Investments in STI-based start-ups, enterprises, and spin-offs increased					
Global Innovation Index (GII) – Investment Index percentile rank improved ^{d/}	17 (2016)	22	24	25	25
Number of TBI graduates increased (i.e., enterprises and spin-offs) ^{a/}	41 (2016)	Increasing**	230***	270***	1,000***
Number of innovation hubs increased (e.g., TBIs, innovation centers, niche centers, etc.) ^{a/}	23 (2016)	63	108***	128***	128***
Sector Outcome 2: Accelerate Innovation					
Subsector Outcome: Creative capacity for knowledge and technology generation, acquisition, and adoption enhanced					
Overall Global Innovation Index (GII) rank improved ^{d/}	Top 58% (2016)	Top 38%**	Top 35%	Top 33%	Top 33%
GII-Knowledge and Technology Outputs percentile rank improved ^{d/}	66 (2016)	Top 33%	Top 33%	Top 33%	Top 33%
R&D expenditure as a proportion of GDP increased (in percent, incremental) ^{a/}	0.16 (2015)*	0.35	0.40	0.50	0.50
Number of researchers per million population increased (incremental) ^{a/}	200 (2015)*	290	295	300	300
Number of STEM enrollees in HEIs increased (in million, incremental) ^{a/}	1.29 (AY 2015-2016)	1.7	1.59	2.03	2.03
Number of STEM graduates in HEIs increased ^{a/}	183,000 (AY 2015-2016)	50,000	113,000	318,000	318,000
Number of <i>Balik</i> Scientists engaged increased (incremental) ^{a/}	25 (2016)	46**	101***	151***	151***
Subsector Outcome: Open collaboration among actors in the STI ecosystem strengthened					
GII University-Industry Collaboration percentile rank improved ^{d/}	52.5 (2016)	Top 49%	Top 49%	Top 49%	Top 49%
Number of collaborations between HEIs and industries increased (incremental) ^{a/}	70 (2014)	120	130	150	150
Number of collaborations between HEIs and government increased (National Government Agencies [NGA] and LGUs) (incremental) ^{a/}	300 (2015)	450	480	500	500
Number of STI-related international cooperations of HEIs increased (incremental) ^{a/}	40 (2015)	80	95***	100	100

^{a/} Original indicators set/approved in 2016 (<https://neda.gov.ph/pdp-results-matrices/2017-2022/>).

^{b/} Indicators set/approved before the pandemic (abridged version as of March 2020)

^{c/} New indicators set/approved after the March 2020 version.

^{d/} Original indicators set/approved in 2016 but with the terms corrected.

* Revision in baseline data.

**2020 original targets set/approved in 2016/prior to the pandemic retained.

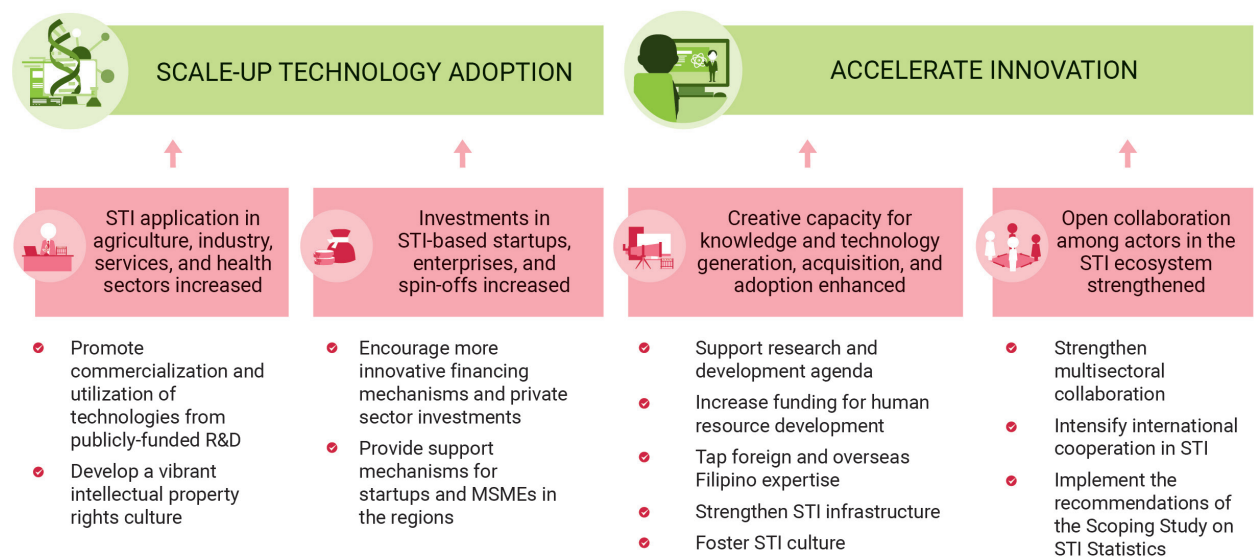
*** Revisions in targets for the remaining years of the Plan period.

Strategic Framework

Many of the strategies under this Chapter were refined to address the problems posed by the pandemic and also considered the existing and anticipated problems of the STI sector. As such, STI is deemed to contribute to the achievement of the overall Philippine Development Plan (PDP) goal of “Healthy and Resilient Philippines” by increasing the country’s growth potential. This will be done by scaling-up technology adoption and accelerating innovation to address the potential challenges ushered in by the new normal. To scale-

up technology adoption, STI application in the agriculture, industry, services, and health sectors, as well as investments in STI-based startups, enterprises and spin-offs, will be increased. These applications primarily cut across PDP Chapters 8, 9, and 10. To accelerate innovation, the creative capacity for knowledge and technology generation, acquisition, and adoption will be enhanced, and open collaboration among actors in the STI ecosystem will be strengthened.

Figure 14.1 Strategic Framework to Vigorously Advance Science, Technology, and Innovation



Strategies

Scaling-up technology adoption

Increasing STI application in agriculture, industry, services, and health sectors

Promote commercialization and utilization of technologies from publicly-funded R&D.

- ***Intensify the rollout of available technologies that can be used during pandemic, state of calamities, emergencies, and the transition to the new normal.*** The government will conduct an inventory for possible scale-up, promotion, and dissemination of available technologies (e.g., technologies for prolonged food shelf-life, possible alternative materials for personal protective equipment, e-vehicles, renewable energy technologies, digital technologies, information-sharing mobile applications and portals, information technology (IT) facilities, telemedicine technologies, COVID-19 tracking and monitoring technologies, contract tracing report system, and disease spread modeling technologies, among others). Shared service facilities and other existing STI support infrastructure will be utilized for mass production. Moreover, the government will incentivize, subsidize, and support researchers and research institutions that will engage in R&D related to development of test kits, medical equipment, vaccines (e.g., COVID-19 vaccine), medicine, and others.
- ***Utilize innovation hubs, business support mechanisms, state universities and colleges (SUCs), private HEIs, and LGUs to promote technologies and government support to innovation activities.*** The government will actively use innovation hubs, online

platforms, support mechanisms to businesses/entrepreneurs (e.g., *Negosyo Centers*), entrepreneurial organizations (e.g., Philippine Chamber of Commerce and Industry), SUCs and HEIs offering business/entrepreneurial courses, offices of LGUs (e.g., city/barangay halls issuing business permits/licenses), and others, as venues to introduce research outputs of the government and the academe that are ready for adoption, as well as the different support services of the government, to startups and MSMEs to help them become more innovative.

- ***Formulate public procurement guidelines for STI PPAs consistent with the Government Procurement Reform Act (GPPRA) (RA 9184).*** The NIC, in coordination with the Government Procurement Policy Board (GPPB), will review and identify problems in the current procurement process for STI PPAs and suggest solutions on how to resolve these constraints. This will entail the issuance of procurement guidelines consistent with RA 9184 that will ensure efficiency, transparency, timeliness, and relevance in the procurement process for STI PPAs (e.g., creation of special/separate procurement process for certain STI projects). This strategy will be prioritized and implemented with urgency, in light of the current pandemic and possible occurrences of disasters, epidemics, and other emergencies.
- ***Operationalize the Filipinnovation Portal.***⁴ The government will fast-track the establishment of the Filipinnovation portal which will serve as a repository of government and academic research and innovation outputs. These research outputs in the portal will be segregated by sector/areas (e.g., farming, fisheries, industrial applications, energy, services, health, construction, food

⁴ The preparation of the Innovation Portal is being supported by the Global Innovation Policy Accelerator. The Global Policy Accelerator program is funded through the United Kingdom government's Newton Fund and delivers executive development to national cohorts of senior policymakers from the main innovation institutions, while strengthening the implementation capabilities of their teams. (<https://www.nesta.org.uk/project/global-innovation-policy-accelerator/>)

production, digital technologies, and national security and defense, among others), for easier reference. The portal will also contain government programs and projects that can be availed to obtain support on innovation activities and scholarship programs. Access to the portal will be free for all Filipinos. Once operational, it will be aggressively promoted to the public and will be regularly monitored and updated, as needed. It will also be integrated and harmonized with the other existing innovation websites of the government such as the Startup Philippines website.

Alongside this, the government will launch an interactive communication strategy or platform where STI results, initiatives, and efforts are highlighted and communicated to Filipinos for their feedback.

- ***Increase public awareness on R&D activities.*** To become more effective in communicating and raising awareness on R&D, investments in promotions and communications will be increased. The government will maximize the use of information and communications technology (ICT)/online platforms in the conduct of technology transfer and commercialization programs, such as science fairs, exhibits, invention contests, and technology transfer days, among others, to help publicize and commercialize the existing technologies from the government, academe, and the industry. Technology promotions under these initiatives will be conducted by sector/area (e.g., agriculture, industry, services, farming, fisheries, industrial applications, energy, services, health, construction, food production, digital technologies, national security, and defense, among others). Face-to-face/physical technology transfer and commercialization programs will still be continued in accordance with appropriate social distancing measures.
- ***Ensure that the transfer or distribution of technologies as a public good will be on a non-exclusive and non-competitive basis.*** To ensure greater access to technologies generated

from publicly-funded R&D, the transfer or distribution of these technologies as a public good will be encouraged. These technologies will be transferred in a non-exclusive and non-competitive manner where no licensing fees, technology fees, and/or royalty will be charged or collected. The provision of free technologies to target users such as farmers, fisherfolk, and small-scale industries, among others intends to upgrade their processes and operations for improved productivity.

Develop a vibrant intellectual property rights culture.

- ***Expand the network of Innovation and Technology Support Offices (ITSOs) and enhance and develop its capacities to do online transactions.*** The Intellectual Property Office of the Philippines (IPOP HL) will continue to establish more ITSOs throughout the country and further enhance the capacities of existing ITSOs to guide innovators/inventors — from IP creation, protection, to commercialization, thus, improving patent applications' performance. In addition, the IPOP HL will capacitate the ITSOs to do their transactions/ services online to assist clients (e.g. inventors) remotely.
- ***Streamline and rationalize administrative and registration procedures to remove several barriers to innovation.*** To encourage and improve innovation, the IPOP HL, in coordination with the NIC, will streamline and rationalize administrative and registration procedures. It will also undertake programs to assist MSMEs in the registration of patents, layout designs, registration of trademarks, and geographical indications and other marks of ownership, industrial designs, utility models, and deposit of copyrights. The IPOP HL will develop and provide the necessary IT infrastructure so that bulk of its services, processes, and procedures can be done online. Reforms on these initiatives will be reported to the NIC for effective monitoring and tracking of results. Under the new normal, e-commerce platforms are expected to be on the rise, thus, the

IPOPHL will also strengthen IP enforcement on virtual platforms.

- ***Increase public awareness of the National Intellectual Property Strategy (NIPS) and steer its adoption.*** The NIPS is the government's main action plan in creating a robust intellectual property regime, with strategies proposed for regulation, administration, and enforcement of IP. The envisioned IP system under the NIPS is seen to be more systematic, comprehensive, and effective in delivering reliable service for Philippine creators and innovators. Hence, the IPOPHL, in coordination with the NIC, will conduct various awareness campaigns/programs to promote the NIPS. Furthermore, the IP process (e.g., from application to commercialization) will also be made part of the curriculum in science and engineering courses to increase awareness and encourage participation.

Increasing investments in STI-based startups, enterprises, and spin-offs

Encourage more innovative financing mechanisms and private sector investments.

- ***Institutionalize the implementation of the Science for Change Program (S4CP).*** The government will institutionalize the implementation of the S4CP to advance the proliferation of demand-driven innovation activities that will respond to the demand of the users of technologies. The S4CP seeks to accelerate and expand STI programs in the country and will promote development and industrial competitiveness in the regions through the establishment of R&D centers under the Niche Centers in the Regions for R&D (NICER) program. The R&D Leadership (RDLead) program supports the NICER program through engaging Filipino experts to lead in strengthening research capabilities of HEIs and research and development institutions (RDIs). It is also expected to boost

academe-industry collaborations and industrial competitiveness through the Collaborative R&D to Leverage Philippine Economy (CRADLE) and Business Innovation through S&T (BIST) Programs. The Department of Science and Technology (DOST) recently launched the CRADLE Challenge 2020 inviting HEIs/RDIs to partner with Filipino private companies to formulate solutions that can aid our industries in overcoming the challenge of the new normal.⁵

- ***Establish and expand the funding mechanisms provided under the Philippine Innovation Act and the Innovative Startup Act.*** The government will invest in the growth and development of startup enterprises and partner with the private sector to ensure availability of financing for startups. The Startup Venture Fund and Startup Grant Fund under the Innovative Startup Act as well as the Innovation Fund, Innovation Development Credit and Financing, and Credit Quota under the Philippine Innovation Act will be operationalized towards ease of access by startups and MSMEs. The government will also require financial institutions to dedicate four percent of their available credit for startups and MSMEs, as promulgated under the Philippine Innovation Act. Thus, the formulation of guidelines on both legislation will be fast-tracked.

Provide support mechanisms for startups and MSMEs in the regions.

- ***Fast-track the implementation of the newly-enacted "Innovative Startup Act" (RA 11337).*** The Philippine Startup Development Program will be formulated to provide monetary and operational support to innovative and technology startups. The program will also provide capacity-building and exchange programs, as well as links to potential investors, collaborators, and customers in the Philippines and abroad. In addition, the MSME Innovation

⁵ The CRADLE Challenge has four thematic areas: (a) sustainable supply and logistics, (b) products for the new normal, (c) reinventing the workplace, and (d) services that transcend boundaries. The developed research outputs are aimed to advance the innovativeness and competitiveness of local Filipino companies and ultimately help jumpstart the Philippine economy.

Development Program will be mobilized to enable government agencies to work hand in hand with private organizations and academic institutions to provide technical and/or financial support programs for the development training of entrepreneurs. A regulatory sandbox⁶ approach will be used by the government for unimpeded roll out of startup technologies.

- ***Bolster government support to MSMEs and startups to enhance their innovation activities.***

This will be done through programs, such as the Small Enterprise Technology Upgrading Program (SETUP) 2.0, "OneExpert, OneLab", Shared Services Facilities, *Kapatid* Mentor Me, "One Town, One Product", and TBI 4.0. To advance innovation and facilitate efficient operation of MSMEs, the services of the Food Innovation Centers (FICs) will be upgraded from product prototyping or pilot-scale processing into toll processing. Pending the operationalization of the Filipinnovation portal, the Startup Philippines website will provide a centralized platform for news and information on government startup support programs and networking and learning opportunities, as well as a one-stop-shop for startup registration and support program applications.

- ***Continue reconfiguring the Department of Trade and Industry's (DTI) lineup of programs and projects available for startups and MSMEs in response to the COVID-19 pandemic.***

In response to the pandemic, the DTI will reconfigure its lineup of projects and programs to make it compatible to the minimum public health standards under the new normal. The establishment of Regional Inclusive Innovation Centers (RIICs) will be continued and replicated in other key areas around the

country (e.g., Batangas City [CALABARZON], Iloilo [Region 6], and Zamboanga [Region 9]). These programs include, but are not limited to, capacity-building activities for eligible and qualified startups or MSMEs affected by the pandemic, funding assistance/credit programs, and matching needs of MSMEs with startup solutions providers.

- ***Expand innovation/business support mechanisms to include online presence.*** Some services of the innovation hubs and TBIs, innovation centers, among others, will be conducted online (e.g., mentoring, training, and consultancy services), if applicable, to comply with social distancing measures. Furthermore, these innovation support mechanisms will also promote their services online to entice beneficiaries. Government agencies with existing online portals on business support mechanisms will be enhanced and strengthened.

The IPOPHL will also conduct training online through webinars such as the Learn, Be Empowered, Adopt, and Profit from IP (LEAP IP) Webinar Project and expand its online payment options for clients.

Accelerating innovation

Enhancing creative capacity for knowledge and technology generation, acquisition, and adoption

Support research and development agenda.

- ***Formulate the National Innovation Agenda Strategy Document (NIASD).*** The government, through the NIC, will craft the NIASD that will establish the country's vision and long-term goals for innovation, consistent with global and regional commitments and with *AmBisyon Natin 2040* and the PDP. This document will also provide a roadmap consisting of strategies and action plans for improving innovation governance (e.g., identifying and addressing the absorptive capacities of government agencies doing R&D).

⁶ A regulatory approach, typically summarized in writing and published, that allows live, time-bound testing of innovations under a regulator's oversight. Novel financial products, technologies, and business models can be tested under a set of rules, supervision requirements, and appropriate safeguards. A regulatory sandbox also creates a conducive and contained space where incumbents and challengers experiment with innovations at the edge or even outside of the existing regulatory framework. (UNSGSA, Briefing on Regulatory Sandboxes.)

The NIASD will contain innovation priority areas (e.g., food security, sustainable agriculture and natural resources, blue economy, education, vocational training, health, renewable energy, climate change and disaster resilience, resource efficiencies, traditional knowledge, traditional cultural expressions, genetic resources, infrastructure, governance, human capital, digital economy, transportation services, security and defense, and others as may be deemed relevant by the NIC), the strategies to be used to realize these priorities, and for which resources and budget will be provided.

In relation, the government will support the conduct of long-term STI foresight studies and development of evidenced-based planning framework to complement the NIASD, taking into consideration the whole STI ecosystem. Increasing capacities on planning tools such as foresight techniques will also be pursued.

- ***Establish relevance criteria and Research, Development, and Extension (RD&E) themes under the new normal.*** The government, guided by the country's innovation agenda and development goals, will develop RD&E themes. These themes will be adopted in the RD&E programs of concerned agencies which will ensure that a higher level of mission orientation in publicly-funded research is observed. A "relevance criteria" will also be applied by the agencies concerned, in the selection of RD&E programs or projects for funding. The relevance criteria will take into consideration the development thrusts and priorities of various regions in the country to ensure alignment (e.g., research areas needed to cope with the COVID-19 pandemic and the new normal). The government will likewise conduct an inventory of academic or educational and RD&E institutions, as well as their resources and capacities to undertake RD&E programs and projects. The inventory will serve as a reference when deciding the allocation of public funds for these purposes. The research areas under the Harmonized National Research and Development Agenda 2017-2022 will be

expanded and aligned with RD&E themes of the government. This will be complemented by sustained and aggressive capacity-building activities particularly for R&D institutions in the regions to spur regional R&D that addresses local concerns, expands opportunities for growth, and brings about significant changes in the regional STI landscape. Additional sources of funding for RD&E will also be identified (e.g., Department of Energy [DOE] unutilized fund and Malampaya).

- ***Conduct R&D studies on renewable energy technologies.*** The government will explore and conduct R&D studies on renewable energy technologies, including the viability of new technologies to expand the share of renewables in the energy supply mix to fuel the country's industrialization and urbanization, while simultaneously being mindful of its environmental responsibility. Moreover, the government will promote an innovation culture that supports new and emerging renewable technologies, as well as innovative business models in the renewable energy industry (see Chapter 19).
- ***Intensify the conduct of R&D through public-private partnership (PPP).*** The NIC will intensify the undertaking of PPP on R&D, including innovation, to encourage the private sector to deepen their R&D activities while at the same time accelerating the public sector's efforts. This will help the government tap more resources, avoid financial and procurement issues, and allow inflows of complementary private sector resources and expertise.
- ***Strengthen monitoring and evaluation system for all STI-related programs and projects.*** Monitoring and evaluation (M&E) mechanisms for RD&E, including impact assessment, will be enhanced to ensure the attainment of targeted outputs and intended outcomes as well as improve process performance. Adoption of the M&E Protocol prepared by the DOST for the STI community will also be encouraged.

- **Operationalize the Philippine Space Agency and implement the Philippine Space Development and Utilization Policy.** With the signing into law of the Philippine Space Act (RA 11363), the government has established the Philippine Space Agency and the Philippine Space Development and Utilization Policy to enable the country to reap the benefits of the development and use of space technologies (e.g., agribusiness, environmental conservation, national security and defense, telemedicine, infrastructure monitoring, urban planning, transportation and communication, and disaster management). This will also provide the Philippines a wider platform to contribute to regional efforts on hazard management and climate studies, space research and development, space industry capacity building, space education and awareness, and international cooperation.
- **Formulate a Human Resource Development (HRD) Plan for researchers in higher education.** This is to ensure that policies in HEIs especially in government-funded institutions provide incentives for research and mentoring. This will entail providing opportunities for aspiring researchers to get startup support, setting policies to make research rewarding (e.g., deloading, compensation, and peer recognition), and ensuring that research outputs are supported for patenting and commercialization within the institution. The plan will be inclusive, allowing small niche institutions to participate and develop their capability to ensure that research capacity is distributed not just in major urban centers of the country. In addition, the plan will also take into consideration the needs of the regions and ensure that research manpower is responsive to those needs.

Moreover, the national budget circular guidelines for promoting faculty members in SUCs and institutions supervised by the Technical Education and Skills Development Authority (TESDA) will be revisited regularly to ensure that those who are engaged in RD&E and innovation, under the Philippine Innovation Act, are given the proper recognition and commensurate points.

- **Accelerate efforts to prepare for the emerging Fourth Industrial Revolution (FIRe) landscape.** The government, through the NIC, will identify the priority frontier technologies⁷ that are relevant to the country's development setting and incorporate these in the RD&E themes that will be developed by the government. The NIC will also provide support (e.g., training programs to build new skills) to those that will be adversely affected (e.g., workers) by the emergence of the FIRe. Accelerating curriculum development related to FIRe and its approval by the Commission on Higher Education (CHED) will also be critical. The Department of Trade and Industry (DTI) - Competitiveness and Innovation Group will continue the implementation of its programs related to the absorption of industry 4.0 technologies and startup development.

Increase funding for HRD.

- **Expand the provision of scholarship programs.** The government will continue and expand the provision of scholarship programs such as the Expanded Specialized Science Secondary Education Scholarships, Expanded Undergraduate Science and Technology (S&T) Scholarships for Inclusive Development, and Expanded S&T Graduate (Masters/ Ph.D.) Scholarships, among others to further encourage students to pursue STI courses.

⁷ There is no universally-agreed definition for frontier technology. However, there is a recurring common feature across the different technological advances and that they all "have the potential to disrupt the status quo, alter the way people live and work, rearrange value pools, and lead to entirely new products and services." (UN-ESCAP, Frontier Technologies for Sustainable Development in Asia and the Pacific, 2018.). Some examples of frontier technologies are nanotechnology, artificial intelligence, internet-of- things, bioprinting, big data, blockchain, robotics, neurotechnology, synthetic biology, and others.

Moreover, the government will implement changes to the STEM curriculum⁸ and include life-long learning skills development to enable workers to respond to the requirements of the FIRE. This will be complemented by an intensive information drive to further increase the number of scholarship applicants. Government officials' leadership capacities for innovation will also be enhanced by conducting regular training programs/management seminars that will enable the government to lead relevant stakeholders (e.g., industries and academe) towards becoming innovative (see Chapter 10).

- **Expand the implementation of entrepreneurship-related courses to engineering and the other allied disciplines.** Technopreneurship courses (e.g., Technopreneurship 101) will be scaled up to expose undergraduate engineering students to the entrepreneurial mindset and the fundamentals of entrepreneurship. As such, it will be spread out to more HEIs throughout the country to increase their appreciation of STI and entrepreneurship, thereby increasing the utilization of technologies and innovation. Development of support programs will also be provided to ensure engineering graduates take on entrepreneurship as a career option.
- **Expand digital skills development programs for government employees and public school teachers.** The DICT, in support of the DepEd, the CHED, and the TESDA, will assist in the provision of teacher training opportunities related to digital literacy, cybersecurity, and other digital skills. The DICT will also contribute to the government's efforts towards digital transformation through the conduct of digital skills development programs for government employees and the deployment of Chief Information Officers (CIOs) to various government agencies. Government employees will be provided with professional training to effectively use digital tools and efficiently perform tasks even in alternative work setups. Government plans, policies, and processes

will also be advanced through the deployment of trained CIOs in government agencies, assigned to lead in the development of internal digital transformation strategies and business continuity plans (BCPs).

The Digital Workforce program of the DICT will also be launched as a capacity-building program to enable the broader use of digital technologies in critical sectors such as education, finance, health, agriculture, and logistics (see Chapter 10).

- **Pursue adult learning through online, distance, and/or blended learning.** This will involve the promotion of more open online courses (MOOCs) and flexible training arrangements through blended programs that will reduce face-to-face contact. Education agencies will also collaborate with the private sector and professional organizations to increase the number of online courses accredited for Continuing Professional Development. Curricular adjustments will be done to adapt to the new teaching-learning mode.

Strengthening formal and informal education on health, food, and well-being will also be pursued to equip Filipinos with the fundamental education and preparedness on sound practices in staying healthy and well.

- **Increase the number of HEIs offering quality programs in STI-aligned fields, especially in engineering and the sciences.** SUCs will invest in the enhancement of quality of program offerings and will explore offering engineering and science programs to increase the number of scientists and engineers. This can be achieved through sustained investments in facilities and faculty development coupled with proactive outreach to potential feeder high schools that could be assisted to provide students for the SUCs. STI HRD will get a boost from the free higher education provided through SUCs.

Tap foreign and overseas Filipino expertise.

⁸ CHED will lead the updating of the curriculum.

- **Support the liberalization of certain professions in the Regular Foreign Investment Negative List (RFINL).** The government will support and pursue initiatives to remove restrictions on the practice of professions by foreign experts (e.g., engineers) listed in the RFINL. Pending the amendments to the relevant national laws which restrict foreign professionals from entering the country, the government will consider crafting procedures and measures in granting of temporary permits (see Chapter 9).
- **Promote more participation of scientists in the Balik Scientist Program.** The government will aggressively promote the enhanced benefits and incentives under the *Balik Scientist Act* to encourage wider participation, particularly, in sectors and areas where expertise is lacking.
- **Promote startup visas and other benefits and incentives under the Innovative Startup Act (RA 11337).** The government will strategically market the country's startup ecosystem to experienced startup founders, investors, and other enablers.
- **Strengthen infrastructure for and regulation of digital transactions.** Given the increased demand for digital transactions (e.g., digital payments, online delivery, digital tax payments, and online financial services, among others), relevant digital infrastructure and regulatory oversight will be strengthened, including closer monitoring of cybersecurity plans. The implementation of DICT's National Broadband Program will be fast-tracked to provide the national ICT backbone to support government services delivery, including the use of digital transactions and the linking of digital transformation and research laboratories as part of the STI ecosystem.

Foster STI culture.

- **Harmonize/consolidate the communication advocacy of the government on STI.** Government will consolidate all its existing communication advocacy and campaigns and turn it into a comprehensive/harmonized advocacy plan to promote better public appreciation and understanding of STI. Privately-owned mass media networks will be incentivized to undertake mass education and promotion of science-responsive communities.

Strengthen STI infrastructure.

- **Establish STI facilities and innovation hubs.** The government will engage with the academe and industry to build more makerspace, innovation hubs, innovation centers, FabLabs, laboratory facilities, R&D centers, and prototyping facilities, as well as science and technology parks in strategic locations throughout the country to support the innovation and technology requirements of the MSMEs and startups. Moreover, the OneLab Network, a platform which integrates DOST analytical and testing laboratories and other laboratories in the Philippines and ASEAN countries, will be strengthened to provide easy access to testing and calibration services. The capabilities of existing and new STI facilities and innovation hubs to execute some of their services online will also be developed.
- **Aggressively promote to the public the importance and benefits of science in helping resolve national issues.** The government will use new and traditional media to inform the public of the benefits, importance, and potential of science to address various challenges and move the country forward. Public trust in science is important for science-based policy to succeed. Highly-technical data and information will be conveyed in a manner that can be easily understood by the public. In the case of the COVID-19 pandemic, the massive information campaign and institution of control measures have helped in the reduction of virus transmission. As an example, altering public behavior to lower virus transmission depends on how scientific data are imparted to the populace. "Flattening the curve" for ordinary citizens was unknown before the pandemic, but

through the communication efforts executed by doctors and scientists in several platforms, people were encouraged to remain indoors to minimize transmission. Misinformation about COVID-19 continually spread, leading to fear of the unknown. Scientific findings and projections on the virus, however frightening, shed light on how extensive it is. Scientists are being relied on to minimize fear, as such, accurate and effective communication by scientists will be used to reduce the anxiety of the populace.

- Better appreciation of STI by Filipinos could also be achieved by communicating tangible results. Several tools have been used to address the challenges caused by the crisis. For instance, the Baguio City LGU used a predictive analytics tool to understand the transmission of the virus in the locality and has contributed to the goal of containing the virus. A group of University of the Philippines (UP) researchers has correctly estimated the number of people to be affected by the virus should the government implement relaxed quarantine guidelines. The UP National Institute of Health (UP-NIH) has successfully developed test kits⁹ that helped expand the testing capacity of the country.

To help enhance the long-term capabilities of the country's workforce to generate new ideas for innovation and at the same time produce an agile workforce, creativity will be strongly nurtured as a vital skill of students at all levels and will also be integrated into all disciplines (e.g., science and engineering courses). The transformation of the DepEd's STEM Program to science, technology, engineering, arts, and math (STEAM) will serve as a starting point (see Chapter 7).

Strengthening open collaboration among actors in the STI ecosystem

Strengthen multisectoral collaboration.

- **Establish and operationalize the NIC.** In line with the Philippine Innovation Act (RA 11293),¹⁰ the government will establish the NIC, an inter-agency committee that will adopt a “whole-of-government approach” in steering the direction of STI development in the country. This will also identify and eliminate the areas of fragmentation/gaps in the governance framework of the STI sector leading to the lack of coherence in the policies, plans, and programs. Moreover, the NIC will strengthen and deepen interactions and partnerships among different actors from the public and private sector, academe, MSMEs, RDIs, and communities towards promoting inclusive growth and improving the quality of life through innovation.

Pending the creation of a secretariat and a unit of personnel that will help carry out the activities of the NIC, the NEDA will constitute an interim Secretariat through temporary detail of personnel from the NIC member agencies, pursuant to RA 11293.

Intensify international cooperation in STI.

- **Encourage open science and collaboration to combat public health issues and emerging diseases such as COVID-19.** International collaboration in scientific research and innovation has accelerated in the past months. The Philippines has taken advantage of this opportunity to improve the country's knowledge and scientific social capital. At the onset of the COVID-19 pandemic, scientific journals were made accessible to the public free of charge.

⁹ Talingdan, Maria Elena A., "DOST-NRCP Vice President Dr. Raul V. Destura, the Scientist behind the First Local COVID-19 Testing Kit," NRCP Website, April 6, 2020.

¹⁰ The law establishes the NIC which will develop the country's innovation goals, priorities, and long-term national strategy. Said Council will also formulate a National Innovation Agenda and Strategy Document that establishes the country's vision and long-term goals for innovation and provides a roadmap and the strategies for improving innovation governance through clear-cut delineation and complementation of innovation efforts across agencies, deepening and accelerating innovation efforts, and integrating and fostering public-private partnerships, among others.

Several digital platforms have also provided opportunities for a more sustained STI international collaboration, as the pandemic pushed global scientific communication. These seem to be proving helpful for the advancement of the STI ecosystem in developing countries, such as the Philippines.

- **Intensify international STI collaboration.** The Philippines will continue to actively participate and figure more prominently in regional and international discussions on STI. As a member of a global scientific community, the Philippines will showcase Filipino ingenuity and innovations as possible solutions to common global problems and concerns. In addition, it will continue to explore new and emerging areas of scientific cooperation where the country and its partner governments and institutions may mutually benefit from (e.g., vaccine development, space and satellite technology, artificial intelligence, security and defense, etc.). The government will also intensify its efforts in improving the country’s STI standing in the international community through information dissemination on potential STI partners in the Philippines, promoting international activities related to STI, and fostering exchanges on STI activities. Further, strategic partnerships will be built with other countries through activities such as joint R&D, exchange of scientists, building researchers’ networks, joint seminars/workshops, technology transfer, and capacity-

building. Bilateral and multilateral partnerships will also be used to acquire new and existing foreign technologies (e.g., those that may be used to address the COVID-19 pandemic and adapt to the new normal).

Implement the recommendations of the Scoping Study on STI Statistics.

The results of the scoping study on STI statistics will feed into the work of and will be implemented by the Inter-Agency Committee (IAC) on STI Statistics. The IAC will aim to resolve the issues and concerns being encountered by various government agencies in producing STI statistics. The government will also identify indicators with available regional data to enable the concerned regional offices to effectively monitor their STI sector. This will allow the regions to provide their regional baselines, targets, and actual data on certain STI indicators.

The government will also require various stakeholders (e.g., SUCs) to submit data that will be recommended under the scoping study (e.g., R&D data) and encourage private corporations to participate voluntarily in sharing relevant data. These data will also serve as the country’s inputs to various global indices. The Department of Budget and Management (DBM) and the DOST will work closely to develop the Unified Accounts Code Structure (UACS) for the R&D spending in the public sector. This will contribute significantly to the data collection and generation of the sector that will substantially aid the development planning cycle.

Legislative Agenda

Table 14.2 Legislative Agenda to Vigorously Advance Science, Technology, and Innovation

LEGISLATIVE AGENDA	RATIONALE
STI application in agriculture, industry, services, and health sectors increased	
Amendments to the Intellectual Property (IP) Code	This seeks to strengthen the IPOPHL as the lead government agency in IP. It intends to improve its organizational structure to maintain and implement effective, efficient, economical, responsive, technology-driven, and sustainable services and programs; protect, enforce, and adjudicate; promote and steer creativity, innovation, development, utilization, and commercialization that would benefit MSMEs; enhance learning, advocacy; and support the enhancement of digital infrastructure and interconnectivity.

LEGISLATIVE AGENDA	RATIONALE
<i>Investments in STI based startups, enterprises, and spin-offs increased</i>	
Science for Change (S4C) Act	This aims to expand various S&T programs of the DOST (e.g., R&D programs, technology business incubation, foreign scholarships) and prescribes the R&D areas to be considered under the S4C Program. The bill also seeks to require NGAs, LGUs, and SUCs to adopt publicly-funded and generated technologies whenever feasible and practicable.
<i>Creative capacity for knowledge and technology generation, acquisition, and adoption enhanced</i>	
Philippine Virology Science and Technology Institute	This will establish a research institute that will delve into the study of viruses. The country needs diagnostics to detect and limit the spread of existing viruses; vaccines to provide long-term protection; treatments to save lives in the shorter term; and social science to understand their behavioral and societal implications.
An Act Creating the Center for Disease Control and Prevention, Providing Mechanisms for Epidemic Control, and for Other Purposes	This proposed legislation aims to establish a center that will be the principal agency tasked with developing and applying communicable disease control and prevention initiatives. It will be responsible for controlling the introduction and spread of infectious diseases.
Comprehensive Philippine Atomic Regulation Act	This proposed measure aims to legislate an independent regulatory framework that will decide on issues affecting public health and safety, protection of the environment, and nuclear security and safeguards, that is beyond the reach of entities with self-motivated interests.
Strengthening the National Measurement Infrastructure System (NMIS), Amending RA 9236 also known as the National Metrology Act of 2003	This seeks to establish the National Metrology Institute under the DOST as well as provide capacity building programs through competency training to strengthen the local metrology authorities at the local level and foster a metrology culture that will instill a keen appreciation of the importance of metrology.
Provincial Science and Technology Office Act	This seeks to strengthen the existing Provincial Centers for Science and Technology (PSTC) under RA 6959 by converting them into an office so that the development and transfer of technologies in the rural areas can be vigorously pursued and implemented.
eHealth System and Services Act	This aims to establish, institutionalize, and regulate a coherent, coordinated, and collaborative National eHealth System, guided by a national policy and strategic framework.
Digital Philippines Act	This aims to adopt a whole-of-government approach in promoting digital innovation and transformation in business and government.
Philippine Defense Industry Development Act	This intends to provide the required policy environment for the development of a national defense industry through the strengthening and revitalizing of the self-reliant defense posture program, incentivizing in-country enterprises, rationalizing defense acquisition, and institutionalizing a functional office for defense technology research and industry development under the Department of National Defense (DND).

PART V

**ENABLING AND
SUPPORTIVE
ECONOMIC
ENVIRONMENT**

15

Ensuring Sound Macroeconomic Policy



Ensuring Sound Macroeconomic Policy

The Philippine economy faced and overcame various headwinds in the first half of the Plan period. Macroeconomic fundamentals remain strong and stable, resulting in a credit rating upgrade for the country. The fiscal position also remains sustainable and supportive of growth with the pursuit of tax reforms, improved spending efficiency, and prudent debt management. Headline inflation rate was generally within target with the implementation of appropriate monetary and non-monetary policy measures. The financial sector remains stable, with significant strides in expanding inclusiveness by simplifying requirements for opening basic bank deposit accounts and creating a legal framework for the use of non-traditional collateral. Moreover, the external sector remains resilient, characterized by a manageable current account deficit and modest trade growth despite disruptions in global markets.

This strong starting position to be complemented with strategic and responsive measures will enable prompt recovery from the downturn caused by the COVID-19 pandemic. Towards a healthy and resilient Philippines, fiscal policy will be made more responsive through enabling budget and policies, enhanced local government units (LGUs) capacity, and improved private sector participation. Targeted supervisory actions and reforms that address the impact of the pandemic remain crucial in fostering the resilience of the country's financial system. Trade partnerships will be intensified, while products and markets will be diversified and scaled up to take advantage of shifts in business processes and consumer preferences under the "new normal."

Assessment and Challenges

Assessment: Over the past three years, substantial improvement in spending performance outpaced an increase in revenue collections, leading to an expansion of the government's fiscal deficit to 3.4 percent of gross domestic product (GDP) by 2019. Nevertheless, the ratio of government outstanding debt to GDP declined as the expansion of the economy outpaced the accumulation of debt. However, this trajectory is expected to be

reversed as the pandemic subdues economic activities. Reduced revenues and increased spending on pandemic recovery measures are seen to further elevate the fiscal deficit and consequently, raise the country's debt ratio. Inflationary pressures of 2018 dissipated in 2019, with headline inflation averaging at 2.5 percent—well within the government's target, as appropriate monetary and non-monetary policy measures were implemented.

Meanwhile, the financial sector remains sound and has become more inclusive, supported by various reforms such as the establishment of rules on the introduction of Basic Deposit Accounts, the expansion of low-cost financial touchpoints, and legislation allowing the use of moveable collateral, and easier customer identification.¹ These reforms are complemented by an enabling regulatory framework establishing a retail payment system. The outbreak of the pandemic drove up demand for digital financial services as people adhered to social distancing measures. There has been an increased preference for doing basic financial transactions online such as bills payment and fund transfers. On the other hand, the possibility of increased demand for insurance lingers with the increase in infections and fatalities caused by the pandemic.

For the external sector, exports of merchandise goods and services posted modest growth during the first half of the Plan period, boosted by improved sales of major export products such as electronic products and fruits and vegetables. Thus, the sector was able to exceed the targets for 2017 to 2019, while the widening trade-in-goods deficit was partially offset by the trade-in-services surplus. The current account deficit—recorded at 0.9 percent of GDP in 2019—is expected to reverse into a surplus in the near term amid a significant deceleration in goods imports mainly due to the sharp decline in global crude oil prices, subdued domestic demand, and disruptions in global supply chains. This is notwithstanding the expected lower receipts from goods exports, trade-in-services, and remittance inflows. The pandemic is expected to reverse gains on trade in goods and services performance with overall global trade seen to slow down. (see *Chapter 2*)

Exports to North America and Asia are expected to be hardest hit with trade from sectors with complex value chains, such as electronics and automotive products, expected to decline. Traders are also expected to rely more on online processing of trade documents to facilitate seamless movement of cargo. Capital flows have been increasingly volatile as risk aversion against developing countries led to capital flight to safe havens.

Challenges: The budget strain in the near to medium-term may impede planned public investments. The implementation of the Supreme Court (SC) ruling on the *Mandanas* Case in 2022 further adds pressure on the tight fiscal position. Institutional bottlenecks and inadequate absorptive capacity also pose risks to the timely implementation of crucial pandemic response and recovery measures, as well as in accelerating the implementation of much-needed infrastructure projects.

Similarly, financial institutions that serve vulnerable sectors may lack the capability to respond to the increased need for digital financial services (DFS). On the other end, low-income households may lack awareness of DFS available to them, as well as the knowledge needed to make sound financial decisions. Cybersecurity threats also pose a challenge. For the external sector, portfolio and direct investments may further slow down as recent developments have led to an overall risk aversion of foreign investors to emerging markets, as well as an erosion of business confidence. In terms of trade in goods and services, an overall weakening in global trade in goods and services, including travel and tourism is expected. (see *Chapter 2*)

¹ Philippine Identification System Act (Republic Act [RA] 11055) and the Personal Property Security Act of 2018 (RA 11057).

Targets

The targets for revenue and tax effort were revised downwards, taking into account muted economic activity due to the COVID-19 pandemic. The consequent changes in programmed spending, as approved by the Development Budget Coordination Committee (DBCC) in July 2020, were reflected in the revised targets for the national government expenditure performance indicators. These changes take into account the government's efforts to support the country's economic recovery and the transition to the new normal. The higher internal revenue allotment (IRA) in 2022, as provided under the SC's decision on the *Mandanas* case, is also reflected in the revised targets. These changes, in turn, were reflected in the upward revision of the targets for the deficit, debt, and interest payments ratio.

The revised targets for the ratio of locally-sourced LGU income to total current operating income reflect the aforementioned increase in IRA. The locally-sourced income of the LGUs in absolute terms was included, as an additional indicator to measure the capacity of the LGUs to generate their sources of revenues.

The following were included as additional indicators in light of the developments arising from the pandemic: (a) VAT revenues from the digital economy to capture the increase in e-commerce activities² (*see Chapter 9*); (b) share of health sector spending on account of the government's shift in focus towards improving health systems (*see Chapter 10*); (c) utilization of the local development fund; and (d) utilization of the Special Education Fund² to measure the capacity of the LGUs to implement their programs, activities, and projects.

The ratio of the financial system's assets to GDP has been adopted to facilitate benchmarking of the depth of the country's financial system. Likewise, equity market capitalization relative to GDP and size of the local currency bond market in percent of GDP replaced old indicators to provide a better measure of domestic capital market development.

On financial inclusion, Plan targets were revised upward for the indicators on the number of access points per 10,000 adults and the proportion of adults (15 years and older) with an account at a bank or other financial institutions or with a mobile-money-service provider, as the initial end of plan targets have already been met. To gauge the extent to which digital technology transforms financial inclusion and to complement the indicator on account penetration which is only able to generate data every two years, higher frequency indicators, such as the volume of InstaPay transfers² and retail e-payments, were adopted. The updated targets for microinsurance penetration include insured principal members and their dependents. The value of microfinance loans provided by microfinance non-government organizations (NGOs) accredited under the Microfinance NGOs Act was added as a measure of financial inclusion, in line with the law's passage and policy.

The targets for exports of goods and services were revised downwards to account for the effects of COVID-19. Likewise, targets were recalibrated to reflect the projected current account surplus due to the narrower trade-in-goods deficit, offsetting the lower receipts from trade-in-services.

² Targets for the indicator are reflected in Chapter 15 of the Philippine Development Plan (PDP) Results Matrices.

Table 15.1 Revised Plan Targets to Sustain a Sound, Stable, and Supportive Macroeconomic Environment

INDICATOR	BASELINE VALUE (YEAR)	TARGETS			
		2020*	2021	2022	END OF PLAN
Subsector Outcome 1.1. Responsive, strategic, supportive, and sustainable fiscal sector					
Government Revenue to GDP ratio improved (%) ^{1/}	15.2 (2016)	17.0	13.2	13.3	13.3
Tax revenue to GDP ratio improved (%) ^{1/}	13.7 (2016)	16.2	12.3	12.5	12.5
Primary expenditure to GDP ratio maintained above baseline (%) ^{1/2/}	15.5 (2016)	18.1	19.1	17.9	17.9
Percentage share of interest payments in the total disbursements managed (%) ^{1/3/}	11.9 (2016)	9.7	11.0-14.0	12.0-15.0	12.0-15.0
Economic service sector expenditure to GDP maintained above 5.0 percent (%) ^{1/4/}	5.7 (2016)	5.7	6.5 ^{5/}	5.7 ^{5/}	5.7
Social service sector expenditure to GDP maintained above 7.0 percent (%) ^{1/4/}	6.7 (2016)	7.3	8.1 ^{5/}	7.9 ^{5/}	7.9
Ratio of discretionary expenditure to total budget maintained above 30.0 percent (%) ^{1/4/ 6/}	42.7 (2016)	41.2 (Actual)	40.1 ^{5/}	32.4 ^{5/}	32.4
Ratio of health sector expenditure to total budget increased (%) ^{4/}	4.4 (2016) ^{7/}	4.5	4.6 ^{8/}	4.1 ^{8/}	4.1
Utilization of current year's budget increasing ^{9/}	92.6 (2018) ^{10/}	increasing	increasing	increasing	increasing
Manageable national government (NG) fiscal deficit to GDP ratio maintained (%) ^{1/11/}	2.4 (2016)	3.0	8.5	7.2	7.2
Manageable outstanding NG debt stock to GDP ratio maintained (%) ^{1/12/}	42.1 (2016)	36.8	58.0-61.0	60.0-63.0	60.0-63.0
Manageable consolidated public sector balance as a share of GDP maintained (%) ^{1/}	-0.1 (2016)	-1.0	-5.8	n.a. ^{13/}	n.a. ^{13/}
Investment-grade credit rating sustained	Stable/ Positive (2016)	At least Stable/ Positive	Sustained investment- grade credit rating	Sustained investment- grade credit rating	Sustained investment- grade credit rating
Ratio of locally-sourced LGU income to total current operating income maintained at or above 15.0 percent (%) ^{14/}	33.0 (2016)	36.2	21.0	15.0	15.0
Locally-sourced LGU income increased (PHP, billions) ^{15/}	179.8 (2016)	256.5	144.9	159.4	159.4

INDICATOR	BASELINE VALUE (YEAR)	TARGETS			
		2020*	2021	2022	END OF PLAN
Utilization of local development fund improved (%) ^{16/}	80.0 (2016)	100.0	100.0	100.0	100.0
Subsector Outcome 1.2. Resilient and inclusive monetary and financial sector					
Low and stable inflation rate achieved (%)	1.3 (2012=100); 1.8 (2006=100)	2.0-4.0	2.0-4.0	2.0-4.0	2.0-4.0
Ratio of financial system's total assets to GDP maintained (%)	123.4 (2016)	130.0	120.0	125.0	125.0
Equity market capitalization relative to GDP (%)	95.4 (2016)	107.0	73.3	78.5	78.5
Size of local currency bond market in % of GDP	32.2 (2016)	45.0	39.2	43.6	43.6
Annual value of microfinance loans increased (PHP billion) ^{17/}	52.7 (2016)	>65.4	>95.0	>104.7	>104.7
Number of access points per 10,000 adults increased (cumulative) ^{18/}	10.1 (2016)	>10	>13	>14	>14
Proportion of adults (15 years and older) with an account at a bank or other financial institutions or with a mobile-money-service provider	22.0 (2015)	Not a survey year	>40	Not a survey year	>40
Volume of retail e-payments in the country (% of total payments) ^{19/}	10.0 (2018)	N/A	N/A	40.0	40.0
Microinsurance penetration (% of total population) ^{20/}	27.2 (2016)	34.0	40.8	44.8	44.8
Subsector Outcome 1.3. Sustainable and resilient external sector					
Exports of goods increased (USD billion) ^{1/}	42.7 (2016)	54.8-56.9	46.1-47.1	47.9-49.4	47.9-49.4
Exports of services increased (USD billion) ^{1/}	31.2 (2016)	47.2-49.0	37.0-37.8	40.0-41.2	40.0-41.2
Sustainable current account balance to GDP ratio achieved	-0.4 (2016)	0.01	0.8 ^{21/}	NA	NA

* 2020 original targets set/approved in 2016/prior to the pandemic retained.

^{1/} Targets for 2021-2022 are based on the macroeconomic assumptions and fiscal program approved by the DBCC on July 28, 2020 via *ad referendum*.

^{2/} Albeit the downward trajectory of the 2021 and 2022 projections for the ratio of primary expenditure to GDP due to higher interest payments, these projections will remain above the actual 2016 baseline value. Thus, the consequent re-statement and revision of targets of the indicator.

^{3/} Figures are projections on the ratio of interest payments to total disbursements, which is foreseen to increase over the medium-term even when compared to the baseline in view of the government's effort to borrow prudently to support the country's economic recovery

^{4/} Targets are based on the emerging proposed FY 2021 budget level, and consistent with the macroeconomic assumptions and fiscal program approved by the DBCC on July 28, 2020 via *ad referendum*. Subject to further refinements based on the FY 2021 National Expenditure Program (NEP) and/or Budget of Expenditures and Sources of Financing (BESF).

^{5/} Targets for 2021 and 2022 for selected fiscal indicators will be on a downward trajectory due to limited fiscal space arising from the combined impact of lower revenue

projections and SC's ruling on the *Mandanas* Case. Subject to further refinements based on the FY 2021 NEP and/or BESP.

⁶⁶ Discretionary expenditure and total budget pertain to cash-based appropriations level. Annual Plan targets for 2021-2022 and actual accomplishments for 2019-2020 are lower compared to actual accomplishments in 2016-2018 due to the transition from obligation-based to cash-based budgeting system in 2019.

⁷¹ Actual 2016 baseline value is in obligation-based appropriations level while medium-term targets for 2020-2022 are in cash-based appropriations level.

⁸¹ Lower target for 2022 relative to the rest of the annual Plan targets reflects the impact of lower revenue projections and SC's ruling on the *Mandanas* Case. Likewise, health is a devolved function. Subject to further refinements based on the FY 2021 NEP and/or BESP.

⁹¹ The indicator measures how fast implementing agencies can obligate/contract out their funds budgeted for the current year. The current year's budget pertains to the cash-based appropriations level.

¹⁰¹ The 2018 actual accomplishment will serve as the baseline value for the indicator to reflect the introduction of the Department of Budget and Management (DBM) transitional reforms to cash-based budgeting system. The updated 2019-2022 targets are in cash-based appropriations level.

¹¹¹ Albeit the upward revision of the targets for 2021 and 2022 due to the combined impact of lower revenue projections and higher disbursements in line with the government's response to address the socio-economic impact of COVID-19, fiscal consolidation (as seen in the downward trajectory of the deficit by the end of the Plan period) will take place to ensure prudent fiscal management.

¹²¹ Targets for 2021 and 2022 were revised upwards due to higher deficit assumption and borrowing requirement. Despite this, the revised targets cluster along the 60 percent emerging economy threshold indicated in most literature.

¹³¹ Target for 2022 is not available as some components of the indicator could only be projected until 2021.

¹⁴¹ Downward revision of the target for 2021 is due to expected slower economic activity (versus original target), complemented with higher IRA for 2021 resulting from the implementation of Tax Reform for Acceleration and Inclusion (TRAIN) in 2018; while the lower target for 2022 relative to the rest of the annual Plan targets reflects the impact of the SC's ruling on the *Mandanas* case, which will significantly increase IRA.

¹⁵¹ It is estimated that LGUs would miss around 30 percent to 50 percent of their original targets for FY2020 to FY2022 due to the financial hardship and economic impact brought about by the COVID-19 pandemic.

¹⁶¹ Figures are based on Bureau of Local Government Finance's (BLGF) projections.

¹⁷¹ Microfinance figures include banks and microfinance NGOs. Data with the Securities and Exchange Commission (SEC) is only based on the Microfinance NGOs accredited by the MicroFinance NGO Regulatory Council.

¹⁸¹ Access points are the regulated entities where both cash-in and cash-out transactions can be performed. These include banks, non-stock savings and loan associations, cooperatives with financial services, microfinance NGOs, pawnshops, money service businesses, e-money agents, cash agents, and other non-bank financial institutions.

¹⁹¹ Share of retail e-payments to total number of retail payments.

²⁰¹ Number of people with microinsurance coverage consists of insured principal members and dependents.

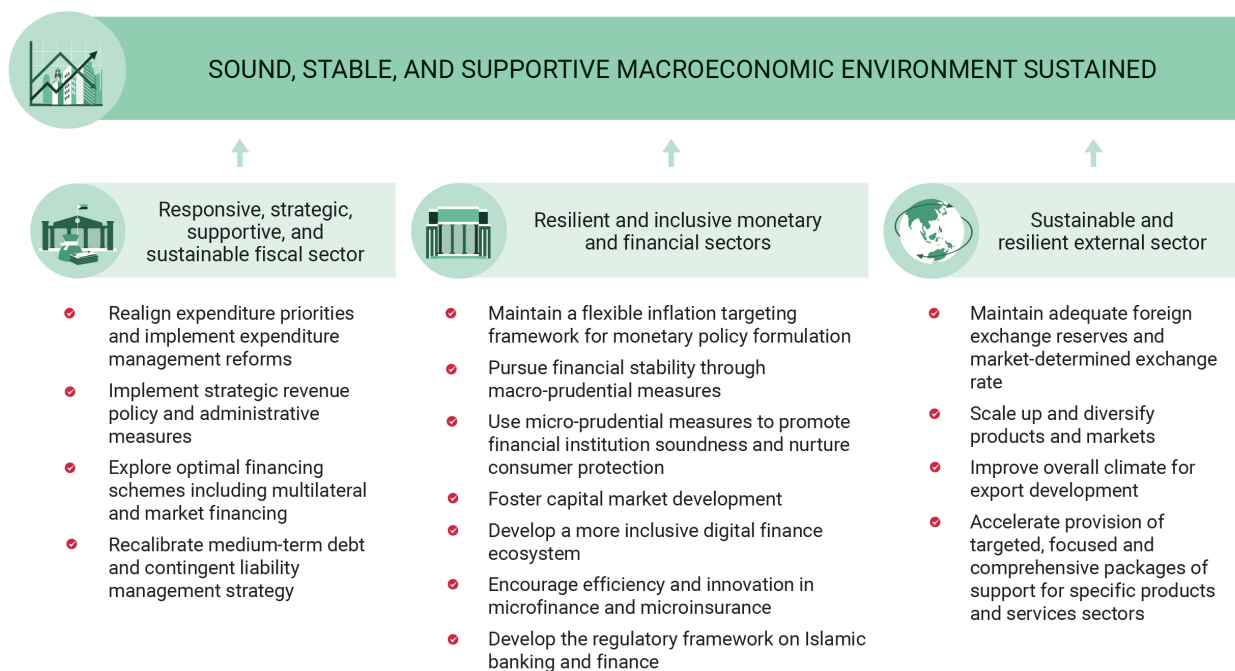
²¹¹ Figures are Bangko Sentral ng Pilipinas (BSP) projections approved by the Monetary Board on October 08, 2020.

Strategic Framework

To achieve the targets above and consequently sustain a sound, stable, and supportive macroeconomic environment, the following sub-sector outcomes will be pursued: (a) responsive, strategic, supportive, and sustainable fiscal sector; (b) resilient and inclusive monetary and financial sectors; and (c) sustainable and resilient external sector.

Amidst the challenges brought about by the pandemic and the transition to the new normal and the increasing pressure on the national government's fiscal position, responsiveness, and sustainability were included in the sub-sector outcome under the fiscal sector, while the third sub-sector outcome was expanded to cover the entire external sector (from external trade sector only previously). The figure below shows the updated framework.

Figure 15.1. Strategic Framework to Sustain a Sound, Stable, and Supportive Macroeconomic Environment



Strategies

Sustaining sound, stable, and supportive macroeconomic environment

Responsive, strategic, supportive, and sustainable fiscal sector

Realign expenditure priorities and implement expenditure management reforms.

- **Strategically realign and reprioritize expenditure.** To facilitate transition and adjustment to the new normal, the government will implement strategic realignment of its budget and reprioritize its expenditures over the near-term. Priority will be given to health-related expenditures, disaster risk management,

food security, digital economy/government, and growth-inducing expenditures such as crucial and shovel-ready infrastructure projects, among others.

- **Pursue institutional reforms to ensure timely execution of projects.** To complement administrative improvements in budget execution, such as the implementation of the Budget and Treasury Management System (BTMS), institutional reforms will be introduced to address persistent bottlenecks. These include the revision of the guidelines on the release of funds for foreign-assisted projects and its alignment with the cash-based budgeting system. Existing Commission on Audit (COA) issuances will be consolidated and codified to resolve ambiguities and inconsistencies. The 1976 Government Auditing Code of the

Philippines³ will also be updated. Furthermore, the implementing rules and regulations of the Government Procurement Reform Act (GPRA) will be further reviewed to address procurement delays. To minimize undue delay in the implementation of crucial infrastructure projects during election periods, amendments to the exemption provisions under the Omnibus Election Code will be pursued. Moreover, to make the budget more responsive to crises and other unprecedented events, institutional reforms to increase flexibility in the emergency use of funds, such as the LGU development fund, will be considered.

- **Implement transition plans for fully devolved functions to LGUs, including capacity development and intensive public information campaign.** To ease pressure coming from the implementation of the SC ruling on the *Mandanas* case, concerned agencies will fast-track the preparation⁴ and implementation of the transition plans, which provide well-defined parameters for functions and services that are fully devolved to the LGUs. The transition plans include the definition of standards for the delivery of devolved services, clear delineation of responsibilities between the national government and the LGUs, and the strategy for capacity development of LGUs, which will involve training for LGUs on development planning. The implementation of the transition plans will be coupled with intensive public information campaigns on the shift in responsibilities in the delivery of basic services which will help increase LGU accountability. Cost-sharing schemes between the national government and the LGUs for projects that are local in nature but benefit multiple LGUs, will also be explored.

- **Fast-track the implementation of priority tax reform measures.** Amid muted economic activity, the passage of growth-enhancing revenue measures, such as the Corporate Recovery and Tax Incentives for Enterprise (CREATE) Act, will provide immediate relief to businesses and encourage investments that will aid the economy's recovery. To further promote crucial investment and innovation, it is important for the government to utilize a regulatory sandbox approach to help develop supportive regulatory frameworks for emerging industries under the new normal (*see Chapters 5 and 16*). Subsequently, the pursuit of the digital transformation agenda, especially the establishment and institutionalization of a digital taxation framework, will help the government manage the challenges and reap the benefits of the digital economy. Meanwhile, once recovery is underway, the passage of the remaining packages of the tax reform program will help sustain growth by correcting inefficiencies and leveling the playing field. These policy reforms will be complemented by tax administration measures, particularly the fuel marking and Electronic Receipt and Invoice System, which will enable the government to recoup needed revenues.
- **Increase local sources of revenue by introducing legislated and non-legislated measures.** Despite the higher IRA under the SC ruling on the *Mandanas* case, the need to pursue measures that will improve the collection of locally-sourced revenues remains. Foremost is the passage of the real property valuation reform, which can help augment property tax collection of LGUs. Legislative measures will also be supplemented with capacity building activities to enable LGUs to access other sources of financing, such as official development grants.

Implement strategic revenue policy and administrative measures.

Explore optimal financing schemes including multilateral and market financing.

³ Presidential Decree No. 1445.

⁴ The crafting of these transition plans will be guided by the framework being developed by the Core Technical Working Group (TWG) on Full Devolution Efforts. The members of the TWG are DBM, National Economic and Development Authority (NEDA), Department of the Interior and Local Government (DILG), Department of Finance (DOF), and Civil Service Commission (CSC).

- **Encourage greater private sector involvement to compensate for the narrower fiscal space.** Private sector participation through various public-private partnership (PPP) modalities will be tapped to ease pressure on the national government’s fiscal position. PPP can also supplement the limited capacities in project implementation at the LGU level.
- **Explore optimal financing schemes including multilateral and market financing portfolio.** The national government will explore various financing schemes, including multilateral institutions to ensure sufficient resources are available to support the economic recovery plan. Furthermore, the Bureau of the Treasury (BTr) will tap the local market through local bonds issuance and the offshore commercial markets through issuance of dollar-denominated debt papers, “panda” bonds, and “samurai” bonds for additional funding sources.
- **Communicate the recovery plan and the temporary nature of deviation from fiscal program to calm markets.** To manage market expectations and ensure stability, the national government will carefully and clearly communicate its recovery plan, as well as the temporary nature of deviation from the medium-term fiscal program. It is important to highlight that the deviation from the medium-term fiscal program is the result of the NG’s effort to mitigate the impact of the COVID-19 pandemic on the economy.

Resilient and inclusive monetary and financial sectors

Maintain a flexible inflation targeting framework for monetary policy formulation. The BSP will continue to refine its monetary operations, including through the interest rate corridor system, to enhance its capacity in guiding short-term market interest rates to move closely with the policy rate. The amendments to the BSP’s charter—particularly on allowing it to issue its own securities—will further expand its policy toolkit and give it more flexibility in determining the size and timing of its monetary operations. The BSP is ready to ease monetary policy settings further and to deploy regulatory relief measures as needed, especially amid the sustained uncertainty brought about by the COVID-19 pandemic. It will continue to vigilantly monitor domestic and international developments for any emerging risks to the outlook for both inflation and economic activity.

Pursue financial stability through macro-prudential measures. Systemic risks have become more prevalent, given the increasing complexity of financial transactions. The Financial Stability Agenda is thus necessarily pre-emptive and will be geared towards containing systemic risks such as the COVID-19 crisis within prudent levels. Conducting macro-prudential stress test exercises is essential in quantifying how risks in the financial markets can be amplified and can create adverse implications for the real economy, and vice-versa. The recently approved

Recalibrate medium-term debt and contingent liability management strategy.

- **Recalibrate debt and contingent liability management** by: (a) continuing to adopt a strategic and sustainable financing mix in favor of domestic sources and optimization of Official Development Assistance (ODA) resource; (b) further diversifying funding sources and instruments; and (c) improving the liquidity of the government securities market. These strategies can be supported by the Local Currency Debt Market Development Roadmap—a reform package that focuses on deepening market liquidity, improving price discovery, and enhancing regulatory oversight and surveillance.⁵ In addition, ensuring that risks related to contingent liabilities are well-managed could safeguard resilience of the country’s fiscal position to future shocks, such as pandemics. Overall, continuously developing the domestic capital market (*see Monetary and Financial Sectors*) and building safeguards against external risks (*see External Sector*) will complement the strategies mentioned above.

⁵ BTr, The Philippine Roadmap: Local Currency Debt Market Development, 2017.

Macroprudential Policy Strategy Framework by the Financial Stability Coordination Council (FSCC) and the Systemic Crisis Management Framework currently underway will provide guidance on how financial authorities will execute the financial stability agenda and handle systemic risks in the Philippine financial system.

Develop a more inclusive digital finance ecosystem. To ensure that the benefits of financial digitalization are optimized, particularly by vulnerable sectors and MSMEs, the country's digital financial infrastructure will be developed, including the regulatory frameworks and platforms that facilitate the scope, scale and reach of DFS. Among others, the Philippine Identification System (*PhilSys*), QR Ph, digital banking,⁶ and open banking are essential pieces in improving this infrastructure. The widespread adoption of formal financial services remains a priority and will be promoted by leveraging on compelling use cases for digital payments (e.g., bills payment, receipt of wages, social transfers, payment of government fees, etc.). This will be complemented by consumer empowerment through digital financial literacy and consumer protection policies, including for overseas Filipinos (OFs) and their families (*see Chapter 21*).

Encourage efficiency and innovation in microfinance and microinsurance for the domestic market. The ability of microfinance institutions to provide digital financial services will be enhanced. Private insurance providers will be encouraged to engage in the delivery of microinsurance for agriculture, in addition to the existing micro-health and pre-need services.

Foster capital market development.

- ***Foster capital market development to secure a well-functioning financial market that is critical to financial stability.*** Developing the domestic capital market and increasing

the efficiency in trading of securities will be facilitated by policies such as the use of forwards, in lieu of spot prices, consolidation of the current exposures into fewer but deeper benchmark tenors, transparent and accessible pricing, and expansion of local investment options. Increased transparency such as through a timely disclosure of delayed payments and contracts with cross-default provisions will help boost investor confidence. Passage of the Collective Investment Schemes (CIS) Act, will harmonize its tax and regulatory framework, provide an even playing field, and the same level of protection to the investing public. The SEC is drafting the rules on Corporate Debt Funds, which will invest primarily in debt papers of large corporations and medium-sized enterprises that need liquidity to support their capital and operating costs to sustain their businesses, especially those affected by the pandemic. On the other hand, the passage of the proposed Package 4 of the Comprehensive Tax Reform Program (CTRP) can level the playing field and remove tax arbitrage between subsectors of finance by reducing and harmonizing withholding taxes across instruments and minimizing friction costs by eliminating the Initial Public Offering tax.

- ***Foster growth of green and sustainable finance market.*** The SEC has issued regulations and guidelines on the issuance of green, social, and sustainable bonds that are aligned with ASEAN standards. Further, it has collaborated with multinational corporations such as the Asian Development Bank (ADB) to seek assistance in developing the market. With the increasing uptake of green bonds in the country, the agency is currently studying the possible publication of guidance for issuing transition and sustainability-linked bonds to provide direction for issuers and assurance for both domestic and foreign investors.

⁶ The Monetary Board approved the Digital Banking Framework which recognizes digital bank as a new bank category that is separate and distinct from the existing bank classification. Digital bank is defined as a bank that offers financial products and services that are processed end-to-end through a digital platform and/or electronic channels with no physical branches. (BSP, Circular No. 110, s. 2020 Guidelines on the Establishment of Digital Banks, November 25, 2020.)

- **Support reforms and initiatives that aim to develop the domestic financial market and expand consumer protection.** The proposed Financial Consumer Protection Law will provide a comprehensive financial consumer protection regime and empower financial regulators to implement specific enforcement actions. The establishment of digital supply chain financing, credit risk database, and online collateral registry will enhance micro, small, and medium enterprises (MSMEs) access to finance. To implement the Personal Property Security Act, a personal property security registry will be developed by the Land Registration Authority (LRA). The amendments to the Warehouse Receipts Law of 1912 seek to establish an online registry system where all electronic warehouse receipts can be lodged and accessed. Lastly, agriculture insurance, guarantee programs, and other mechanisms that address risks in the agriculture sector will be put in place to strengthen agricultural financing (*see Chapter 8*).

Develop the regulatory framework on Islamic banking and finance. The Regulation and Organization of Islamic Banks Act was signed into law in 2019. There were also provisions on Islamic banking contained in the Bangsamoro Organic Law. The BSP has issued drafted circulars on the guidelines on the establishment of Islamic banks and Islamic banking units, and the guidelines on the Shari’ah Governance Framework. In addition, there is an ongoing technical assistance from the ADB to expand Islamic financial services in the Philippines, which include capacity-building programs to discuss Islamic finance.

Use micro-prudential measures to promote financial institution soundness and nurture consumer protection. The resilience of financial systems depends on sound regulations and supervision from monetary authorities. Amid the COVID-19 crisis, regulatory relief measures have been implemented to support financial institutions and ensure liquidity flow into the economy.⁷ Among others, these include the use of capital conservation and liquidity buffers to absorb losses and support financing requirements of the overall economy and authorizing banks to book their allowance for credit losses on a staggered basis for a maximum period of five years.⁸ Consistent with BSP’s prudential framework, requests for the extension of eligibility period for these measures will be evaluated and handled on a case-by-case basis. In this manner, targeted and temporary supervisory actions will be taken and blanket reduction or suspension of micro-prudential measures will be avoided in dealing with the temporary impacts of the pandemic. Communication and transparency between the financial institutions, regulators, and the public will remain essential to provide a true picture of the financial position of an institution and guide regulators in designing appropriate policy responses.⁹

- **Strengthen monitoring of insurance sector and expand information campaigns on available products and services.** The economic impact of COVID-19 outbreak on the insurance sector is significant and multi-faceted. As the COVID-19 pandemic accentuated the need for insurance services and products, intensified informational campaigns on available products and services will be necessary to reach the public. Improved insurance literacy will help protect consumer interest and enable them to make sound and well-informed financial decisions. The rise in

⁷ BSP, Memorandum No. M-2020-039, Utilization of Basel III Capital and Liquidity Buffers, May 4, 2020.

⁸ BSP, Memorandum No. M-2020-008, Regulatory Relief for BSP-Supervised Financial Institutions (BSFI) Affected by the Corona Virus Disease 2019 (COVID-19), March 14, 2020.

⁹ International Monetary Fund (IMF), Banking Sector Regulatory and Supervisory Response to Deal with Coronavirus Impact (with Q and A), Special Series on COVID-19, May 13, 2020.

insurance claims,¹⁰ coupled with the possibility of insurance companies including pandemics in the coverage of their future policies, will likely result in an increase in insurance premiums in the near-term. The possible surge in demand for insurance products may give rise to insurance fraud, which will affect both consumers and insurers. As such, there is a need to strengthen the monitoring of the insurance sector to avoid capital and liquidity problems that could lead to insolvency of insurance companies and to ensure consumer protection.

Sustainable and resilient external sector

Maintain adequate foreign exchange reserves and market-determined exchange rate. The country's flexible exchange rate policy should provide macroeconomic stability amid external headwinds. In addition, the BSP implements measures to cushion the impact of sharp peso movements such as maintaining a healthy level of forex (FX) reserves as a buffer, reviewing and adjusting macro-prudential measures, and using liquidity-enhancing and management tools such as the United States (US) dollar repo facility, exporter's dollar and yen rediscounting facilities, and the enhanced Currency Rate Risk Protection Program, among others. Lastly, amid the COVID-19 pandemic, the BSP implemented operational relief measures for FX transactions to help stabilize market conditions and restore confidence. These relief measures, which aim to facilitate the public's access to FX resources of the banking system to finance legitimate transactions, are effective only for the duration of the declaration of any form of "community quarantine" by the Office of the President (OP), or as may be extended by the BSP.

Scale up and diversify products and markets.

- ***Strategically participate in bilateral, regional, and global integration, and optimize the utilization of existing free trade agreements (FTAs).*** Trade tensions between major trading partners US and China exacerbated by mobility restrictions to stem the rise in COVID-19 has dampened trade (*see Chapter 2*). Philippine merchandise exports and imports are expected to decline in 2020 by 16 percent and 18 percent, respectively. The pandemic has also highlighted the significance of diversifying products and markets to reduce vulnerability to supply constraints and shifts in production chains.

To ensure that utilization of existing preferential market access is enhanced and facilitated, the reach of advocacy programs will be expanded through information sessions and greater use of data-driven analytics. This will be complemented by the development of a database for utilization of FTA agreements and an assessment tool to identify gaps and formulate initiatives to enhance utilization. The compliance of partner countries with their FTA commitments will be closely monitored. The government will pursue negotiations to expand or lock-in current preferential concessions, such as the review of the Philippines-Japan Economic Partnership Agreement and the ASEAN+1 FTAs. In addition, active negotiations will be carried out with existing trading partners, such as in the proposed Regional Comprehensive Economic Partnership Agreement, the Philippines-Korea FTA, the Philippines-EU FTA, and a possible agreement with the USA.

The existing governance structure on negotiations for international trade agreements will be strengthened. Effective coordination among different interagency bodies involved in international trade agreements, timely monitoring and assessment of gains and challenges, and capacity building activities

¹⁰ Based on the survey conducted by the Insurance Commission (IC), total COVID-19 related payouts amounted to PHP 326.95 million, of which PHP 19.68 million were ex-gratia payments. The survey was conducted from April 16 to May 8, 2020. ("Life and Non-Life Insurers, Mutual Benefit Associations (MBA) and Health Maintenance Organizations (HMO) Exhibit Financial Resiliency Against COVID-19-Related Claims, According to Survey Conducted by the IC," Press Release, June 4, 2020).

to develop a continuing pool of trade negotiators, will enhance the country's capacity to forge strategic trade agreements.

The government is presenting the Philippines as a complementary host country for the production of health products, electrical equipment and appliances, metal products, automotive and auto parts, machinery and equipment, optical lenses, and furniture to firms that were either affected by the COVID-19 pandemic in China or the trade tension between China and the USA. The government will also leverage the country's preferential access to the US and EU (through the Generalized System of Preferences [GSP] scheme).

- ***Enhance economic and technical cooperation with trading partners and pursue strategic partnerships with other non-traditional trading partners.*** Enhancing existing cooperation with major partners while forging new partnerships and engaging non-traditional but strategic partners are vital approaches to strengthen the country's position in these markets and open up new opportunities for our exporters. Fragmentation of global trade and supply linkages and the trade measures implemented by various countries during the pandemic (*see Chapter 2*) also point to the need to expand cooperation with traditional and non-traditional trade partners. Regional stockpiling and operationalizing of a logistics scheme to ensure supply of essential goods will be explored, in line with the goals of ASEAN Connectivity 2025 on promoting seamless logistics in the region. The country will also engage non-traditional partners in Eastern Europe, Northern and Central Asia, Middle East, Latin America, and Africa through dialogue mechanisms or possible trade agreements.
- ***Intensify promotion of Philippine exports in digital platforms and targeted marketing***

efforts for international leads. As digital transactions become the new norm, firms must be able to harness the potential of the internet in conducting their businesses. Local exporters will be capacitated to increase their online presence and be sensitized to potential changes in market preferences (e.g., shift in demand to comfort wear, electronics, protective equipment). In lieu of physical trade missions and fairs, online business to business (B2B) matching events and realistic virtual trade fairs with improved visual content and detailed product descriptions will be considered as avenues for trade promotion. The Department of Trade and Industry (DTI) and the Department of Foreign Affairs (DFA) will likewise bolster a feedback mechanism with diplomatic posts, trade, and agricultural attaches to obtain accurate information on market access opportunities, especially in non-traditional but strategic markets, and provide market relevant and timely information in a single website. Platforms such as the Philippine Trade Repository and the TradeLine will be made more user-friendly and refocused on practical content for exporters and potential buyers.

Consistent national branding strategies will be utilized across goods, services, and investment sectors to ensure maximum recall and effectivity. Design-centric and quality-driven products will be promoted in niche markets. For instance, sustainable and eco-friendly indigenous materials (such as bamboo) can be used for market segments with a specific preference for these types of products. Moreover, green certification among MSMEs will be aggressively promoted by the DTI. Green-trepreneurs will also be encouraged to become global by supporting the conduct of the Green Business Forum, among others. Green certification provides an opportunity for MSMEs to gain competitive advantage against large companies as global demand for green

products are steadily on the rise.¹¹ Support for the use of green certification among MSMEs will be provided.

Participation in investment promotion events or high-level outbound missions to Korea, Japan, China, Taiwan, and the US may be timed with bilateral FTA negotiations or meetings.

Improve overall climate for export development.

Continuous structural reforms will serve as the backbone of ongoing efforts to develop a better business environment and create development opportunities.

- ***Strengthen supply side interventions to improve the quality of Philippine exports.*** The issuance of a National Quality Infrastructure Law will be pursued to establish the country as a provider of quality products (*see Chapter 9*). To ensure supply chain resilience, better business continuity planning in the export sector will be supported. Logistics reforms such as strategic warehousing as well as cold chain systems will be prioritized. An integrated website tracking real-time information on cargo release, availability of supply, production, and inventory is useful for the national government and LGUs, as well as the private sector, to avoid disruptions and uncoordinated supply flow. A registry or database of importers and traders will also be developed for seamless issuance of permits and necessary trade documents to ensure a steady supply and to keep track of inventories, particularly during emergencies. The present warehouse receipt system will be overhauled to include the creation of an online electronic warehouse receipts registry system.

Upgrading of production processes will be pursued to integrate automation of operations,

as well as put in place innovative and alternative business processes that will become the new standard on engaging clients, buyers, and suppliers. The digitalization of these operations will enable the Philippines to increase the reach of its products, develop product lines that respond to consumer demand, promote trade through virtual tours, discover better marketing leads, and reallocate other resources to diversify and develop non-traditional exports.

Through the Inclusive Innovation Industrial Strategy (i3S), a competition-innovation-productivity relationship will be pursued to address a highly-liberalized market environment by growing innovative and globally-competitive manufacturing, agriculture, and services sectors to combat challenges as a result not only of globalization but also of rising regional economic integration.

While Information Technology and Business Process Management (IT-BPM) continues to lead the services exports sector, it needs to innovate to stay ahead.¹² The government will encourage investments in skills development to tap into higher-value services like animation, data analytics, and cloud computing by strengthening its industry-academe linkages. The country needs to harness its comparative advantage in emerging creative industries (i.e., heirloom and furniture production, weaving, advertising, architecture, culinary arts, film, performing and visual arts, animation, and game development) (*see Chapter 9*). The Shared Service Facilities Project of the DTI will improve the competitiveness of MSMEs (*see Chapter 9*).

Engaging the private sector to invest and set up more agri-based industries will also help in developing agricultural products for exports (*see Chapter 8*). Programs that link MSMEs to

¹¹ Green products are those that are considered as natural, healthy, eco-friendly, and socially responsible. These also include products that carry eco-labels confirming that the products meet voluntary sustainability standards or international private standards through third-party certification such as organic-certified, fair-trade-certified, culture-based certified (i.e., Halal, Kosher, vegan), environmentally-sustainable (i.e., cruelty-free, dolphin safe, UTZ certified, Forest Stewardship Council-certified, Scientific Certification Systems, Inc.-certified), and have natural content.

¹² IT-BPM covers multiple information technology and business process activities while Business Process Outsourcing (BPO) only covers contact centers (i.e. voice and non-voice) outsourcing services.

large companies that are part of or operate their own global supply and/or value chains will be sustained (*see Chapter 9*).

The government will prioritize logistics reforms that will rationalize the freight system and establish strategic warehousing, as well as cold chain systems. Enterprises will be encouraged to rethink and adjust production and storage facilities to ensure optimum access with the least disruptions. Development of partnerships with local suppliers to reduce vulnerabilities will be supported. The formation of a Supply Chain and Logistics Committee which will be responsible for identifying and implementing programs that will improve the flow of goods will be considered.

Amendments to the Customs Modernization and Tariff Act (RA 10863) to allow for the expeditious process of tariff modifications in times of crises will be considered to augment local supply. Likewise, amendments to the Special Economic Zone Act of 1995 (RA 7916) may be considered to relax export requirements pertaining to threshold values for domestic sales in cases of emergency as declared by the President and subject to applicable laws, rules, or regulations. Further, incorporating amendments related to provisions that will address alternative work arrangements may also be considered. Currently, issuances from the DOLE¹³ and Memorandum Circulars¹⁴ issued by the PEZA enable work from home arrangements given the current situation.

- ***Develop a holistic communication management system and increase market intelligence responsive to dynamic consumer preferences.*** The DTI, the Department of Agriculture (DA), and the Bureau of Customs (BOC) will work together with the Department of Interior and Local Government (DILG), in establishing a crisis communication management system which

shall be primarily designed to facilitate the release and enhance monitoring of shipments and transport of basic and critical goods from ports to LGUs. The joint undertaking will strengthen the lines of communication among the NG, LGUs, and private sector, enabling the immediate dissemination of critical information regarding supply and logistical concerns on basic necessities and critical goods during emergencies. The development of a compendium of standard operating procedures in times of crisis shall also be among the group's primary outputs as it shall serve as a useful resource for future emergency situations.

- ***Pursue full implementation of enabling laws, support amendments to investment-related laws, and ensure timely implementation of trade facilitative platforms.*** Implementation of the TradeNet will be accelerated to ensure efficient government services and a robust monitoring and evaluation framework that will facilitate the movement of cargo through the digitalization of processes and payments. The new system shall also curb trade costs and create ease in securing trade documents.

Full implementation of the Ease of Doing Business and Efficient Government Service Delivery (EODB-EGSD) Act will be pursued to streamline processes or regulations that impede exports. The Public Service Act will also be pushed, which will allow foreign investments in transport and communication. This, in turn, can help reduce shipping costs (*see Chapter 9*). Other legislations that will allow foreign competition and improve the competitive environment such as the Foreign Investments Act (FIA) and the Retail Trade Liberalization Act (RTLA) shall also be pursued.

Development of mechanisms to track initiatives related to regulations will enable the country to align regulations with other countries and identify necessary capacity building initiatives

¹³ DOLE, Labor Advisory 2020-17. Guidelines on the Employment Preservation upon the Resumption of Business Operation, May 16, 2020.

¹⁴ Philippine Economic Zone Authority (PEZA), Memorandum Circular 2020-011, PEZA Assistance to Ecozone I.T. Enterprises in Responding to COVID-19, March 5, 2020.

and norm-setting. The enforcement of science-based sanitary and phytosanitary (SPS) protocols will be strengthened to guard against various diseases that may be brought in through imports. Relevant agencies such as the Bureau of Quarantine and other regulatory agencies shall be equipped with detection equipment and the hiring of properly trained personnel.

The government will also provide adequate information and communications technology (ICT) and logistics infrastructure to achieve connectivity and facilitate the movement of traded goods (*see Chapter 9*). This will allow for the use of electronic Certificates of Origin and electronic SPS Certificates under the ASEAN Single Window to reduce trade costs.

The Philippine Trade Facilitation Committee will also be established to improve coordination of trade facilitation regulations and procedures in line with the country's World Trade Organization (WTO) commitments.¹⁵

Accelerate provision of targeted, focused and comprehensive packages of support for specific products and services sectors.

- ***Target support to specific sectors that have great potential to improve the country's external position.*** A comprehensive package of support measures related to product development, research, capacity-building, and marketing approaches will be provided to assist exporters in restarting operations in a calibrated manner while maintaining minimum health standards. To improve the response to product demand shifts in the long-term, capacity-building programs through education and training activities for exporters shall be implemented to fully tap technology-enabled B2B/e-commerce platforms and engage in trade marketing activities despite the pandemic. These would include tapping

the technology-enabled platforms in the conduct of webinars, web conferences, and online media advertisements, and the creation of websites and visual content for online trade promotion activities. Among the priority sectors will be electronics, food (including urban farming), IT-BPM, tourism, education, healthcare, logistics, construction, personal protective equipment (PPE), solo mobility solutions/transport-related products and services, and creative industries.¹⁶

Industry roadmaps that will include the development of business continuity plans for promising export-oriented industries will be developed to better prepare firms for the challenges of the new normal. The Board of Investments (BOI) will continue to work with the industry, specifically for export-oriented and priority industries, in coming up with recovery plans and preparing/updating of industry roadmaps to prepare and assist firms for changes brought about by the new normal.

The DTI under the Regional Interactive Platform for the Philippine Exporters Plus (RIPPLES Plus) and Philippine Halal Export Development and Promotion Program (PHEDPP) will likewise continue to coordinate with other trade promotion agencies and the private sector to undertake export development and marketing activities to expand the supply base of internationally-competitive Philippine export products and services and to provide intensified, purposive, and practical assistance.

¹⁵ This is a commitment under Article 23.2 of the WTO Trade Facilitation Agreement.

¹⁶ Includes film, animation, game development, graphic arts and design, and advertising.

Legislative Agenda

Table 15.2 Updated Legislative Agenda to Sustain a Sound, Stable, and Supportive Macroeconomic Environment

LEGISLATIVE AGENDA	RATIONALE
Fiscal Sector	
Passage of the remaining packages of the Comprehensive Tax Reform Program ^{1/}	<p>This seeks to amend the National Internal Revenue Code of 1997 to achieve a simpler, fairer, and more efficient tax system.</p> <p>Among the packages, Package 2 or the CREATE is a priority. The measure aims to institute reforms in the corporate tax system (e.g., reduce corporate income tax rate) and the fiscal incentives system, directing them toward strategic growth industries, to attract greater foreign investment and generate more jobs.</p>
Digital Taxation Framework	This will ensure a level playing field between traditional industries and the digital economy given the expected shift of the private sector to online transactions amid the new normal.
Unified Pension Reform Bill	The bill aims to introduce reforms in the military and uniformed personnel's (MUP) pension system, which, among others, include (a) mandatory contribution scheme; and (b) increase in the compulsory retirement age, to curb the ballooning pension costs and to ensure fiscal sustainability.
Budget Modernization Bill	The proposed legislation aims to institute sound Public Financial Management (PFM) practices to promote transparency, accountability, and efficiency in the use of public resources.
Amendment to the Omnibus Election Code	This will allow the exemption of key priority infrastructure projects from the ban during the election period in order to ensure the timely implementation of these projects.
Update the 1976 Government Auditing Code of the Philippines (Presidential Decree 445)	This measure seeks to revise the outdated provisions of the Government Auditing Code considering the technological advancements, innovations, and other changes in the conduct of government auditing across the globe.
LGU Income Classification Bill	The proposed bill aims to institute the income classification of provinces, cities, and municipalities, to make it reflective of the LGUs' financial capability, particularly their ability to generate locally-sourced revenues.
Key legislative measures that will improve local government finance, such as the LGU Property Insurance Bill (see <i>Chapter 19</i>) and Amendment to the Local Government Code of 1991 (see <i>Chapter 5</i>).	

LEGISLATIVE AGENDA	RATIONALE
Monetary and Financial Sector	
Enactment of the Financial Consumer Protection Law	This will empower financial regulators to formulate and implement rules and regulations, conduct surveillance and examination, monitor supervised entities, and have enforcement powers relative to financial consumer protection.
Amendments to the Bank Secrecy Law	This will make financial institutions comply with international standards on transparency and help facilitate investigations on tax evasion, money laundering and other financial crimes.
Amendments to the Securities Regulation Code	The proposed amendments will enable SEC to enforce its rules and regulations relative to its supervision over the corporate sector, the capital market participants, the securities and investment instruments market, and the investing public.
Collective Investment Schemes Bill	The bill will provide a comprehensive regulatory and legal framework for Collective Investment Schemes.
Amendments to the Warehouse Receipts Law	This will overhaul the present warehouse receipt system and provide an online registry system where all electronic warehouse receipts can be registered and accessed.
Amendments to the Agri-Agra Law	This seeks to amend the Agri-Agra Reform Credit Act of 2009 (RA 10000) to strengthen rural development by providing for a holistic approach that takes into account the broader agriculture financing ecosystem and rural community development requirements.
Financial Institutions Strategic Transfer Bill	The bill aims to maintain the financial health of banks and other financial institutions in order to cushion the adverse economic impact of the COVID-19 pandemic.
Government Financial Institutions Unified Initiatives to Distressed Enterprises for Economic Recovery (GUIDE) Bill	GUIDE will provide financial assistance to firms that are strategically important to economic recovery, in view of their role in providing employment and supporting the Philippine economy.
External Sector	
Amendment of the Customs Modernization and Tariff Act (RA 10863)	This will allow for the expeditious process of tariff modifications in times of crisis in order to augment local supply and ensure that essential medical supplies are stable.
Amendments to the Special Economic Zone Act of 1995	The proposed amendments aim to consider relaxing export requirements and incorporate provisions which will address telecommuting and work from home arrangements in response to the pandemic.
Key legislative measures that will promote a sustainable and resilient external sector include measures listed under Chapter 9 such as National Quality Infrastructure Bill, Amendment to the FIA, and Amendment to the RTLA.	

^{1/}Also includes Package 2+: Mining Fiscal Regime, Package 3: Real Property Valuation, and Package 4: Passive Income and Financial Intermediary Taxation

16 Promoting Competition



Promoting Competition

Competition makes markets perform better and promotes inclusive economic growth. It induces producers to reduce costs, innovate, and widen the range of goods and services available to consumers. It allows a level playing field where small entrepreneurs and firms, apart from larger players, may operate and grow. Competition raises productivity, expands economic opportunities, increases people's real incomes, and improves overall welfare. It especially benefits the poor through job creation and lower prices made possible by the entry, growth, and expansion of efficient firms and through greater variety and higher quality of goods and services.

The Philippine Development Plan (PDP) 2017-2022 reinforces the Philippine Competition Act (PCA) through strategies that aim to foster an environment that penalizes anti-competitive practices, facilitates entry of players, supports regulatory reforms, and improves trade policies to stimulate investments and innovation and boost competitiveness.

As the country reels from the economic consequences of the COVID-19 pandemic, there is a need to refocus the government's strategies and interventions towards a healthy and resilient Philippines. Hence, this chapter outlines strategies and interventions that stimulate economic recovery and restore market efficiency to ensure a more resilient, inclusive, and competitive market.

Assessment and Challenges

Assessment: The unrelenting efforts of the government and its proactive interventions to sustain healthy competition in the market have yielded positive results. The performance of the Philippines in terms of the Global Competitiveness Index (GCI) from 2016 to 2018 recorded an improvement, although with a slight drop in 2019. This notwithstanding, the country's performance in terms of product market efficiency and market size as well as business dynamism vis-à-vis the annual plan target for 2019 posted notable improvements. However, in the face of the COVID-19 pandemic, micro, small, and medium enterprises (MSMEs) had to temporarily close due to community quarantine restrictions, and their cash flow constraints have resulted in increased debt,

difficulty in covering overhead costs, and supply chain interruptions. While work-from-home arrangements and digitalization made it possible for business operations to continue, these worked for only a small percentage of firms in the country. Hence, in our transition to the new normal, the government needs to refocus its interventions to fast-track economic recovery to ensure that markets are resilient, inclusive, and competitive. Financial and technical support should be provided to firms especially MSMEs to help them recover from the adverse effects of the pandemic and be able to thrive in the market. Government interventions should be carefully considered to ensure a level playing field and avoid market distortions. The current regulatory framework should be reviewed

to ensure that government regulations do not pose a barrier for firms to enter and re-enter the market and hamper competition. Similarly, potentially anti-competitive agreements should be examined to prohibit price fixing, output limitation, market sharing, and activities that abuse dominant position.

Challenges: Advancing pro-competitive policies remains one of the challenges in leveling the playing field. The implementation of the National Competition Policy (NCP) requires a whole-of-government effort to ensure that government responses and interventions follow competition principles to address market failures and distortions especially those arising from the COVID-19 pandemic. To this end, the issuance of an Administrative Order (AO) by the President is being sought to lend more strength to the Joint

Memorandum Circular (JMC) on the NCP that was signed by the National Economic and Development Authority (NEDA) and the Philippine Competition Commission (PCC). Considering the economic consequences of the pandemic, improving the regulatory environment becomes even more crucial to help MSMEs enter or re-enter the market and thrive. Strong enforcement against cartels and other anti-competitive practices is also essential to ensure consumer welfare protection. Awareness of competition, especially in the regions remains low, thus continuous advocacy of the PCA should be pursued to increase public awareness, not only of the PCA but also of the vital role of PCC, in promoting competition.

Targets

The remaining plan period is geared towards addressing the gaps and challenges in promoting and enforcing competition while taking into consideration the challenges arising from the new normal.

Table 16.1 presents the baseline values (2016) for each core indicator as well as the plan targets (in percentile rank) for 2020 up to the end of plan targets in 2022.

Table 16.1 Updated Plan Targets to Promote Competition

INDICATOR	BASELINE VALUE (YEAR)	TARGETS			
		2020 ^a	2021	2022	END OF PLAN
Global Competitiveness Index (GCI) ranking improved	59 (Top 41%) 2016	63 (Top 37%)	63 (Top 37%)	64 (Top 36%)	64 (Top 36%)
Business Dynamism improved ^b	62 (Top 38%) 2016	69 (Top 31%)	70 (Top 30%)	71 (Top 29%)	71 (Top 29%)
Product Market Efficiency improved	28 (Top 72%) 2016	63 (Top 37%)	62 (Top 38%)	65 (Top 35%)	65 (Top 35%)
Extent of Market Dominance improved ^c	17 (Top 83%) 2016	20 (Top 80%)	21 (Top 79%)	22 (Top 78%)	22 (Top 78%)
Market Size improved	78 (Top 22%) 2016	80 (Top 20%)	78 (Top 22%)	80 (Top 20%)	80 (Top 20%)
Burden of Government Regulation improved ^d	15 (Top 85%) 2016	29 (Top 71%)	32 (Top 68%)	35 (Top 65%)	35 (Top 65%)
Starting a Business Score improved ^e	68.56 2016	83	100	100	100

^a 2020 targets were set prior to onset of the COVID-19 pandemic; 2021, 2022, and end of plan targets were adjusted to take into consideration the ill effects of the pandemic.

^b Business Dynamism is one of the 12 pillars of the GCI under "innovation and sophistication" sub-index measured, in terms of supplier quality and quantity and value chain breadth, among other indicators.

^c Extent of Market Dominance is an additional indicator which the Planning Committee for Chapter 16 deems contributory in ensuring healthy competition in the country. Extent of market dominance is an index under product market efficiency pillar that captures the characteristics of corporate activity in a country; either dominated by few business groups or spread among many firms.

^d Burden of Government Regulation is a substitute for the old indicator, "Product Market Regulation," which has been removed due to the issue in the regularity of its release. It measures government performance vis-à-vis existing regulations for businesses in complying with government administrative requirements (e.g., permits, regulations, reporting).

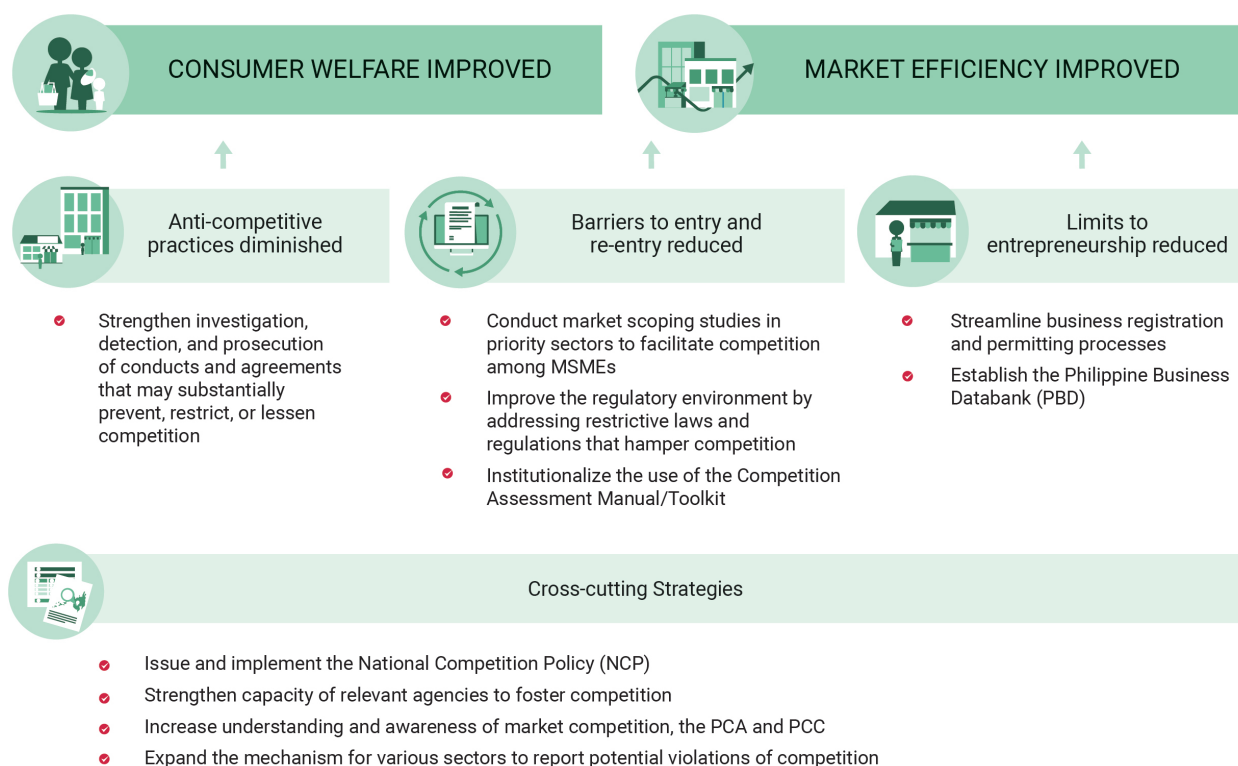
^e Starting a Business is a substitute indicator for "regulatory compliance costs incurred by firms reduced (PHP)," which has been removed due to the absence of a standard methodology in measuring regulatory compliance cost. It is one of the World Bank's (WB) ease of doing business indicators and is deemed more appropriate in measuring the reduction of limits to entrepreneurship.

Strategic Framework

In light of the ill effects of the COVID-19 pandemic, the revised strategic framework presents strategies aimed at hastening economic recovery. Specifically, it focuses on sustaining promotion of competition and implementation of the PCA and other competition-related issuances to create a level playing field where small business

players alongside larger ones, may operate and thrive. Improving the regulatory environment to reduce barriers to entry and facilitate the re-entry of firms that may have closed down as a result of the community quarantine restrictions will likewise be pursued.

Figure 16.1 Strategic Framework to Promote Competition



Strategies

Improving consumer welfare

Diminishing anti-competitive practices

Strengthen investigation, detection, and prosecution of conducts and agreements that may substantially prevent, restrict, or lessen competition. The investigation of potentially anti-competitive behavior while maintaining an environment where businesses and government-owned and controlled corporations (GOCC) can compete on a level playing field will be pursued. The impact of the actions of firms on market efficiency, competition, and consumer welfare will be quantified. This information will be useful to the public, as well as policymakers in understanding the seriousness of the competition problems, in certain sectors and of the benefits that could be derived from inhibiting anti-competitive practices.

Noting the likelihood of firms forming cartels in the guise of corporate re-structuring and forming monopolies by way of mergers or acquisitions during the pandemic, the PCC will strictly monitor the prevalence of acts in violation of the PCA and other competition-related laws and issuances to protect the welfare of firms and consumers. It will heighten efforts in addressing anti-competitive practices in the new normal to ensure that firms do not engage in cartelistic agreements, abuse of dominance, and other anti-competitive conduct.

On the other hand, collaborative efforts among competing firms to ensure more effective and efficient delivery of essential services and articles of prime necessity in the new normal may be considered, subject to the PCA and other competition-related laws and issuances.

Office for Competition (OFC) under the Department of Justice will gear towards a virtual platform for the conduct of training for prosecutors, investigators, and staff to better enhance institutional capacity. The OFC will fully implement the recently issued Rules Implementing the Criminal Provisions of the PCA, which includes provisions for electronic filing of complaints and applications for criminal leniency.

Improving market efficiency

Reducing barriers to entry and re-entry

Conduct market scoping studies in priority sectors to facilitate competition among MSMEs. Considering the economic consequences of the COVID-19 pandemic, the government will provide financial and technical support to MSMEs to enable them to thrive in a market participated in by larger and more established foreign and domestic players. For MSMEs to better respond to increasing customer expectations and competition in the market, digitalization of business processes, capacity building on formulating and implementing business continuity plans, and upskilling and retooling of the workforce should be adopted. The PCC, NEDA, and the Department of Trade and Industry (DTI) will continue to conduct market scoping studies in priority sectors that will provide comprehensive market analysis and identify concerns that need to be addressed. Other strategies to ensure the welfare and development of MSMEs are cross-referenced in Chapter 9.

Improve the regulatory environment by addressing restrictive laws and regulations that hamper competition. To increase the number of business players in the market and facilitate their entry and re-entry, especially MSMEs, the government will address barriers to entry that stem from government regulation, patent protection, start-up costs, education, licensing requirements, or technological challenges.

In the services sector, the government will open sectors to foreign players and consider the enactment of legislation that will ease requirements for the practice of professions in the country to not only increase competition but also push local players to further improve their goods and services. Opening the telecommunications sector, for instance, will ensure more reliable internet services in the country and digitalization of businesses, especially of small business players and MSMEs in the new normal.

In the construction sector, the government will address public restraints by reviewing regulations that hinder competition such as the nationality-based distinction, which creates an uneven playing field between local and foreign contractors. The subsequent strengthening of regulatory quality within the industry will effectively reduce the formal and informal costs of doing business that held back sector efficiency and performance far below its inherent potential for so long.

To address other technological challenges, the government will continue to support research and development efforts to further pursue technological advancements in the country.

Institutionalize the use of the Competition Assessment Manual/Toolkit. The PCC will adopt the Competition Assessment Manual/Toolkit in identifying and reviewing potentially anti-competitive laws and regulations that address several development objectives but have unwarranted consequences on market competition. This manual/toolkit will be a capacity-building tool for government agencies to enhance their understanding of pro-competition interventions. It will enable government agencies to determine the impact of these laws and regulations on market competition, and possibly develop alternative regulations that are able to achieve development goals with the least harm to competition. To ensure improvement of the quality of regulations, the principles and steps under the manual/toolkit will be integrated into the Regulatory Impact Assessment (RIA) manual being formulated by the Anti-Red Tape Authority (ARTA).

Reducing limits to entrepreneurship

Streamline business registration and permitting processes. To minimize the number of transactions and physical contact with various government agencies during business registration and submission of business-related requirements, the ARTA will continue to promote the establishment and implementation of one-stop shops and adoption of online registration system across the government. The ARTA will continue to coordinate with the Department of Information and Communications Technology (DICT) and monitor the development

and implementation of the Central Business Portal (CBP), as mandated by the Ease of Doing Business and Efficient Government Service Delivery (EODB-EGSD) Act of 2018. The CBP will facilitate faster and more convenient ways of registering, as well as securing and submitting other business-related permits. It will promote interconnectivity, integration, and linkage of the systems developed by the national government agencies (NGAs) and the local government units (LGUs).

The ARTA will be strengthened in terms of regulatory management practices to include reducing unnecessary regulatory burdens and requirements. To achieve this, the ARTA will continue coordinating with relevant government agencies for the implementation of Program NEHEMIA (National Effort for the Harmonization of Efficient Measures of Inter-related Agencies), which commenced in the first quarter of 2020. NEHEMIA is an interagency program that aims to streamline and reengineer inter-agency processes affecting priority sectors of economic and social significance. The priority sectors for the 2020 cycle of Program NEHEMIA are: (a) food and pharmaceuticals, (b) telecommunication towers, (c) power/energy, (d) housing and construction, and (e) logistics.

Establish the Philippine Business Databank (PBD). The PBD will be established pursuant to the EODB-EGSD Act to provide the government a single point of access to data and information of registered business entities to verify their existence, validity, and other relevant information. It will include the Philippine Standard Industrial Classification, a detailed classification of industries prevailing in the country according to the kind of productive activities undertaken by establishments. With this in place, the PBD will serve as a medium in implementing a more streamlined and uniform procedure for the issuance of business-related licenses, clearances, permits, certifications, or authorizations. It will facilitate online submission of documentary requirements and processing of requests. This arrangement will facilitate ease of doing business, enticing more firms to participate in the market at the local level. It also enhances the zero-contact policy, curbing corruption, and ensuring public health and safety in view of the COVID-19 pandemic.

Cross-cutting Strategies

Issue and implement the NCP. A Joint Memorandum Circular embodying the NCP has been issued by the NEDA and the PCC. However, to ensure a whole-of-government effort and support to promote competition, the issuance of an AO by the President will be sought.

The NCP prescribes guidelines to steer regulations and administrative procedures of government agencies to level the economic playing field. It will direct and guide all NGAs, GOCCs, and LGUs to ensure that all policies, rules and regulations, actions, and interventions are not anti-competitive.

The NCP highlights three key elements: Pro-competitive Policies and Government Interventions; Competitive Neutrality; and Enforcement of Competition-related Laws and Issuances.

Under Pro-competitive Policies and Government Interventions, the government will ensure that all policies, laws, rules and regulations, issuances, and other interventions do not unnecessarily distort competition. It will amend or repeal anti-competitive laws and regulations and factor in market competition in the formulation of new policies. The adoption of this element in the design of government interventions will reduce barriers to entry and re-entry as well as reduce limits to entrepreneurship. This will be beneficial in facilitating the market participation of more firms, especially MSMEs, which are among the most affected by the COVID-19 pandemic.

Under Competitive Neutrality, the government will ensure that the GOCCs and private sector businesses compete on a level playing field. Unless it can be clearly demonstrated that greater public interest will be served and the undertaking lacks commercial viability, the GOCCs will not enjoy net competitive advantages or disadvantages over private sector businesses simply because of public sector ownership. To promote competitive neutrality, the Governance Commission for GOCCs (GCG) and the Department of Budget and Management (DBM) will continue to review the mandates of the GOCCs within their respective jurisdictions and make

appropriate recommendations to the President to ensure, among others, the separation of proprietary and regulatory activities. Moreover, the GCG and the DBM will lead in the drafting of guidelines on the grant of subsidies in favor of GOCCs based on an assessment of the nature, form, extent, and costs and benefits of these government subsidies and interventions and their impact on the business environment. They will also implement regulatory and non-regulatory measures to neutralize any advantage or disadvantage that may accrue due to public sector ownership.

Lastly, under Enforcement of Competition-related Laws and Issuances, the government will uphold the original and primary jurisdiction of the PCC over issues involving cartel agreements, abuse of dominance by firms, anti-competitive mergers and acquisitions, and other anti-competitive behaviors. In support of the mandate of the PCC, all government agencies will identify specific actions within their areas of responsibility to promote competition and eliminate anti-competitive behavior and undue regulatory burdens on competition.

Strengthen capacity of relevant agencies to foster competition. The PCC and the OFC will continue to implement capacity-building programs aimed at strengthening the technical competencies of the government in developing interventions and measures to address anti-competitive and other pernicious practices affecting the supply, distribution, and movement of goods and services, especially during emergencies. These programs will be made available through in-person training and classes (subject to strict physical distancing protocols) or through distance learning such as online courses and webinars.

Increase understanding and awareness of market competition, the PCA and the PCC. Household surveys show there is still low appreciation and awareness of market competition, including the PCA and the PCC. While it has conducted regional roadshows before the COVID-19 pandemic, the PCC will sustain its grassroots campaign. It will form strategic partnerships with education institutions, among others, and utilize traditional

as well as social media to conduct advocacy initiatives that can help increase awareness on market competition and its benefits to the public. Through these campaigns and advocacy initiatives, the PCC will also engage citizens to play an active role in monitoring and reporting anti-competitive practices through a complaint desk via trunkline and online platform.

Expand the mechanism for various sectors to report potential violations of competition. the PCC will sustain its implementation of the Leniency

Program, which offers immunity from suit or reduction of administrative fines to any entity that participates in an anti-competitive agreement¹ but offers to provide information and full cooperation during the investigation and prosecution of the violation. As one of the tools used by competition agencies in detecting cartels, this program facilitates the reporting of cartel members of their anti-competitive conduct to aid the PCC and the OFC in the investigations and prosecution. Citizens will also be encouraged to report violations of competition to the said agencies.

Legislative Agenda

To strengthen the country’s promotion of market competition, the government will work towards the passage of the following key legislation:

Table 16.2 Legislative Agenda to Promote Competition

LEGISLATIVE AGENDA	RATIONALE
Amendment of the Public Service Act (Commonwealth Act No. 146)	<p>This measure will define “public services” and “public utilities,” which have been used interchangeably, to distinguish the former from the latter. The 1987 Philippine Constitution limits the operation of a public utility to citizens of the Philippines or to corporations or associations, at least 60 percent of whose capital is owned by Filipinos.</p> <p>It will also lift foreign equity restrictions in certain sectors that offer services not under the scope of public utilities, such as those engaged in the telecommunication services. This will encourage potential investors to participate, reducing the market power of incumbent firms.</p>
Amendment of the Foreign Investments Act (FIA) of 1991 (Republic Act [RA] 7042)	<p>The proposed amendments will ease restrictive provisions in the FIA to address procurement restrictions and lengthy procedures that hamper foreign investment and participation of foreign bidders in local procurement. It will also include provisions to ease restrictions on the practice of professions in the Foreign Investment Negative List.</p>
Amendment of the Consumer Act of the Philippines (RA 7394)	<p>This measure will facilitate the growth of e-commerce and ensure that firms respond to the requirements in the new normal and thrive in the digital economy. It will regulate ecommerce to protect both firms and consumers from fraudulent schemes.</p> <p>E-commerce will play a big role in the new normal as businesses and consumers increase the use of online transactions (see Chapter 9).</p>
Amendment of the Magna Carta for MSMEs (RA 9501, amending RA 6977)	<p>The proposed measure will promote the growth and development of MSMEs by addressing challenges, such as limits to entrepreneurship and lack of access to finance and markets, among others. It will also increase access of MSMEs to financing, such as extending credit window to recover from the economic consequences of the COVID-19 pandemic.</p>

¹ PCC, Rules of the Leniency Program of the PCC, December 27, 2018.

PART VI

**FOUNDATIONS
FOR SUSTAINABLE
DEVELOPMENT**

17 Attaining Just and Lasting Peace



Attaining Just and Lasting Peace

A society where there is just and lasting peace is critical to the realization of *AmBisyon Natin 2040* or the Filipino people's collective aspiration of a *matatag, maginhawa, at panatag na buhay* (strong family and community ties, a comfortable and secure life). Peaceful communities can harness the fruits of economic growth through improved access to social services and financial opportunities, and increased overall human development, without fear or threat to their lives and livelihood. Conversely, economic development can diminish the likelihood of armed conflict, especially if socioeconomic interventions are inclusive, participatory, and sustainable.

In the first three years of the current administration, significant strides have been made resulting in the successful negotiation and implementation of peace agreements with internal armed conflict groups. Complementary interventions for the continuous protection and development of conflict-affected and conflict-vulnerable communities were also pursued along with the implementation of other peacebuilding initiatives.

For the remainder of the Plan period, interventions in conflict-affected and conflict-vulnerable areas will be sustained while being mindful of the new health protocols. This is to ensure that the socioeconomic impact of the COVID-19 pandemic will not aggravate the fragile situation in such areas, and that peace building efforts would contribute towards a healthy and resilient Philippines.

Assessment and Challenges

Assessment: The first half of the Plan period marked significant milestones in the peace process. The enactment and ratification of the Bangsamoro Organic Law (Republic Act [RA] 11054) paved the way for the establishment of a new political entity in the Bangsamoro, ending the decades-long armed conflict with the Moro Islamic Liberation Front (MILF). The Bangsamoro normalization process was fast-tracked through the issuance of Executive Order (EO) 79, s. 2019.¹ The government has likewise continuously engaged the two groups

of the Moro National Liberation Front (MNLF) to ensure the implementation of the remaining commitments under the 1996 Final Peace Agreement (FPA). Efforts to complete the implementation of the peace agreements with the *Rebolusyonaryong Partido ng Manggagawa-Pilipinas* – Revolutionary Proletarian Army-Alex Boncayao Brigade (RPMP-RPA-ABB) and the Cordillera *Bodong* Administration-Cordillera People's Liberation Army (CBA-CPLA) were also actively pursued. These were complemented

¹ Implementing the Annex on Normalization under the Comprehensive Agreement on the Bangsamoro (CAB).

by the institutionalization of a whole-of-nation approach to end local communist armed conflict through the issuance of EO 70 in 2018. Socioeconomic interventions, reintegration programs for former rebels and former violent extremists, and other various peacebuilding initiatives to create an enabling environment for peace and development were also implemented.

Challenges: While the government remains committed to build on and sustain the gains of the peace process, the current pandemic introduced new challenges in the implementation of peace agreements. Refocusing of budget priorities to address the impact of the pandemic can affect or delay the implementation of some components of peace agreements and of various socioeconomic interventions for conflict-affected and conflict-vulnerable communities. Both the physical and virtual inaccessibility (e.g., lack of internet access, low level of capacity to use technology) particularly in geographically-

isolated, conflict-affected communities can limit government in implementing alternative mechanisms to deliver socioeconomic and peacebuilding initiatives. New policies such as health protocols and quarantine restrictions, also pose hurdles in the implementation of peace building programs particularly those requiring face-to-face interactions in affected communities.

The pandemic has increased the vulnerabilities and further limited the capacities of poor and conflict-affected communities to respond to other economic, social, and environmental shocks. Moreover, violent extremists and terror groups may take advantage of the crisis to ramp up terrorist activities. The gains from the peace process that have been achieved thus far could take a setback due to this situation. Hence, it is imperative to find alternative and innovative approaches to sustain the gains of the peace processes amidst the pandemic.

Strategic Framework

The government remains committed in pursuing efforts to attain just and lasting peace for the remainder of the Plan period. These include the effective implementation of signed peace agreements and continuous delivery of various

peace and development interventions in conflict-affected and conflict-vulnerable areas. These will be undertaken despite the challenges posed by the current pandemic.

Figure 17.1 Strategic Framework to Attain Just and Lasting Peace



Strategies

To achieve these outcomes, the following strategies will be implemented in line with the President’s Six-Point Peace and Development Agenda:

Successfully negotiating and implementing peace agreements with all internal armed conflict groups

Support the Bangsamoro Transition Authority (BTA) as the interim government of the Bangsamoro Autonomous Region in Muslim Mindanao (BARMM). As the interim government

during the transition period from 2019 to 2022, it is critical for the BTA to lay down the foundations for the establishment of a fully-functioning BARMM government in 2022 or beyond, as may be provided by the Congress. Foremost are the enactment of priority legislations, the determination of parliamentary districts for the first regular elections of the Parliament members, the organization of its own civilian bureaucracy, and the full transfer of powers and properties of the dissolved ARMM regional government to the BARMM. These activities are guided by the BTA’s priority pillars: education, health, economic development, strategic infrastructure, and moral leadership. A critical component in the implementation of the peace

agreement is the immediate organization of all mechanisms under the National Government–Bangsamoro Government Intergovernmental Relations Body (IGRB), which resolves all potential issues and concerns, ensuring smooth relationship and coordination through continuous engagements and consultations. The National Government and the Bangsamoro Government will fast-track the organization of the two remaining intergovernmental relations mechanisms, namely, the Philippine Congress–Bangsamoro Parliament Forum and the Bangsamoro Sustainable Development Board. The five other mechanisms have already been organized: (a) Intergovernmental Fiscal Policy Board; (b) Intergovernmental Energy Board; (c) Intergovernmental Infrastructure Development Board; (d) Joint Body for the Zones of Joint Cooperation; and (e) the Council of Leaders.

Intensify the implementation of the normalization program for the Bangsamoro.

The Inter-Cabinet Cluster Mechanism on Normalization (ICCMN), along with other joint bodies (Joint Normalization Committee, Joint Peace and Security Committee, and Joint Peace and Security Teams), is tasked to guarantee the completion of the components of the normalization program. These include (a) timely decommissioning of MILF forces and their weapons particularly for the Bangsamoro Islamic Armed Forces (MILF's forces); (b) implementation of socioeconomic development efforts for MILF decommissioned combatants; (c) transformation of identified MILF camps into villages with increased access to economic opportunities; and (d) implementation of interventions towards social healing, reconciliation, and cultural harmony to address the legitimate grievances of the Bangsamoro people. The ICCMN also includes the creation of a technical working group that will assess the propriety of grant of amnesty, pardon, or other available processes towards the resolution of cases of persons charged with or convicted of crimes and offenses connected to the armed conflicts in Mindanao. The implementation of these components during the pandemic

will comply with the required health-related guidelines, protocols, and restrictions.

Complete the implementation of the remaining commitments under the 1996 Final Peace Agreement between the Government of the Philippines (GPH) and the MNLF.

The government will further pursue the completion of its remaining commitments under the 1996 FPA with the MNLF through the coordinating committees created in 2019 with the *Misuari* and *Jikiri* groups. These include the establishment of the Bangsamoro Development Assistance Fund (BDAF) intended to uplift the conditions of the MNLF and the operationalization of a monitoring mechanism anchored on the results of the Tripartite Review Process (TRP) between the GPH, MNLF, and the Organization of Islamic Cooperation (OIC). The full implementation of the 1996 Final Peace Agreement (FPA) will contribute to sustainable and durable peace, development, and security in Mindanao and ensure inclusivity of peace dividends.

Implement a transformation program for the MNLF combatants.

A transformation program for the MNLF combatants, their families, and communities will be implemented through the coordinating committees, beginning in the Province of Sulu. It shall mirror the Normalization Program of the Moro Islamic Liberation Front (MILF) and intends to deter disgruntled MNLF combatants from joining the *Abu Sayyaf* Group and other violent extremist groups in the Southern Philippines, thereby contributing to the enduring peace and stability in the Bangsamoro.

Effectively implement the National Plan to End Local Communist Armed Conflict 2019-2022 that will operationalize the whole-of-nation approach to address local communist and other armed conflicts.

The National Task Force to End Local Communist Armed Conflict (NTF-ELCAC),² together with the Cabinet Officers for Regional Development and Security, will oversee the implementation of the whole-of-nation approach

² The NTF-ELCAC is headed by the President as Chair and the National Security Adviser as the Vice-Chair.

through the regional³ and local task forces and the 12 lines of efforts (LOEs)/clusters.⁴ The NTF-ELCAC will ensure inter-cluster convergence of efforts in addressing community armed-conflict issues. In addition, these task forces and LOEs will support and complement action plans to address the impact of the pandemic at the national, regional, and local levels, including the localization of interventions through the Barangay Development Program (BDP).⁵ Referral protocols for monitoring and response will also be streamlined to improve vertical and horizontal connectivity of various cluster mechanisms.

Effectively undertake localized peace engagements through community consultations and problem-solving sessions, and local peace dialogues with local insurgent groups. The *Lakbay Kapayapaan* Roadmap for Peace and Development⁶ will be mainstreamed as the primary mechanism to support localized peace dialogues in communities based on mutual confidence and trust. In connection to this, the government will prioritize the enhancement of capacities of local chief executives and the strengthening of the role of local government units (LGUs) in carrying out peace dialogues, and the complementation and convergence of socioeconomic packages to communities and individual former rebels and their families.

While the current pandemic calls for alternative mechanisms in carrying out engagement activities with communities, face-to-face interactions will still be undertaken especially in local community dialogues, consultations, and problem-solving sessions, albeit in strict compliance with public health standards and protocols. Face-to-face interactions are important in building and

rebuilding confidence with the communities, especially in providing a safe democratic space for communities to raise issues and concerns that are at the root of, resulting from, or further aggravating the armed conflict. It also provides a platform for constructive engagement among the community, the government, and other stakeholders, and provides opportunities for strengthening capacities for peace. Alternative mechanisms such as the use of digital platforms will be utilized only when necessary and feasible.

Fast-track the completion of remaining commitments under the signed agreements with the RPMP-RPA-ABB and the CBA-CPLA. The government remains committed to complete the implementation of the remaining commitments under these agreements by 2022. The completion strategy for the RPMP-RPA-ABB involves engagements with the *Tabara-Paduano* Group (TPG) and the *Nilo de la Cruz* Group (NDCG). The 2019 Clarificatory Implementing Document (CID) lays down the commitments towards the absolute and final settlement of the 2000 Peace Agreement with the RPMP-RPA-ABB between the government and the TPG. These include the full transformation of the TPG from an armed group into a civilian organization through a three-year normalization plan that will facilitate development assistance to its members, their families, and identified communities. Engagement with the NDCG is also being pursued within the bounds of the 2000 Peace Agreement, with full observance of the ceasefire agreement. Meanwhile, the completion strategy for the CBA-CPLA focuses on the implementation and sustainability of socioeconomic reintegration programs for former CPLA members, their families, and communities. Multi-stakeholder

³ The regional task forces are created through the convergence of the Regional Peace and Order Councils and the Regional Development Councils, and are headed by the Cabinet Officers for Regional Development and Security.

⁴ These are: (1) local government empowerment; (2) international engagement; (3) legal cooperation; (4) strategic communication; (5) basic services; (6) infrastructure and resource management; (7) poverty reduction, livelihood, and employment; (8) peace, law enforcement, and development support; (9) situational awareness and knowledge management; (10) localized peace engagement; (11) Enhanced Comprehensive Local Integration Program (E-CLIP) and amnesty; and (12) sectoral unification, capacity building, empowerment, and mobilization.

⁵ The BDP is a peace and development convergence initiative of the NTF-ELCAC which provides socioeconomic interventions, (e.g., farm to market roads, school buildings, health stations, livelihood support, etc.) to communist terrorist groups-cleared barangays.

⁶ The *Lakbay Kapayapaan* Roadmap aims to institutionalize and champion sustainable peace and development agenda at the grassroots by continuously building strong and capable institutions, strategic partnership of government and non-government organizations, and heightened citizen participation through whole-of-nation approach to establish and sustain peaceful, progressive, and resilient communities.

convergence to support regional peace and development advocacies and interventions towards the Cordillera autonomy will also be pursued.

To this end, collaboration and partnerships through existing peace process mechanisms need to be sustained especially in recalibrating specific strategies in light of the new normal. Digital communications infrastructure is also needed in the conduct of critical activities such as monitoring of project implementation, consultation meetings with various stakeholders, and capacity-building and skills development programs for beneficiaries.

Protecting and developing communities in conflict-affected and conflict-vulnerable areas

Strengthen convergence and complementation in the implementation of peace and development interventions. Convergence of all government efforts and mechanisms at the national, regional, and local levels will be critical in advancing the protection and development of conflict-affected areas. These include the *Payapa at Masaganang Pamayanan (PAMANA)* Program, the Retooled Community Support Program (RCSP), the E-CLIP,⁷ programs and projects under the NTF-ELCAC, and crisis and contingency planning activities as provided under EO 82, s. 2012.⁸ The Regional Task Forces of the ELCAC will be further strengthened as a mechanism for national and regional coordination to address key issues and concerns affecting peace, security, and socioeconomic development.

Inter-agency programming and agency-level budget prioritization need to be strengthened in light of foreseen priorities towards addressing the impact of the COVID-19 pandemic. This is to ensure that the aforementioned peace and development interventions will still be effectively implemented amidst this crisis.

Empower communities by increasing their capacity to address conflicts and reducing their vulnerabilities. Strengthening local capacities for addressing peace, conflict, and security issues remains central in sustaining the government's community-based support and peacebuilding programs. The government will continue its engagements with severely affected and vulnerable groups in armed conflicts (i.e., women, indigenous peoples [IPs], children, elderly, internally displaced peoples [IDPs]) and pursue the application of inclusive and participatory approaches to empower these groups. Moreover, partnerships with women and youth sectors and the local civil society organizations (CSOs) will be strengthened in recognition of their significant role in advancing the peace education and peace advocacy agenda. In this regard, the government will sustain its efforts for various capacity development and advocacy initiatives on conflict-sensitive and peace-promoting (CSPP) approaches, providing avenues for dialogues with vulnerable groups and their communities. Face-to-face peace conversations will still be conducted, albeit in strict compliance with public health standards and protocols. Use of alternative digital platforms and other forms of mass media such as local radio and television, will also be considered.

Strengthen government peace and development institutions and mechanisms to increase their accountability and responsiveness to peace and human security issues. Strengthening institutions to effectively ensure security, restore public

⁷ E-CLIP's coverage was expanded through Administrative Order (AO) 25, s. 2020, amending AO 10, s. 2018, Centralizing All Government Efforts for the Reintegration of Former Rebels and Creating for the purpose an Inter-agency Task Force. This provides for a comprehensive, integrated, and community-based national program that is locally implemented to address the economic, social, psychological rehabilitation needs, legal status and security of Former Rebels (FRs) who are members of the CPP-NPA-NDF, former violent extremists, their immediate family members and communities through the E-CLIP. The Task Force Balik Loob (TFBL) oversees the implementation of the E-CLIP.

⁸ EO 82, s. 2012: Operationalizing the Practical Guide for National Crisis Managers and the National Crisis Management Core Manual, and Establishing National and Local Crisis Management Organizations.

confidence, and provide economic opportunities is critical, particularly in light of emerging multi-dimensional risks arising from armed conflicts, disasters, and health-related hazards. Establishing accountability mechanisms will enable the government to appropriately respond to various threats to communities in conflict-affected and conflict-vulnerable areas.

Planning, implementation, and monitoring and evaluation of peace and development programs will likewise be undertaken to ensure streamlined and harmonized government response to various peace and security issues. Mainstreaming of CSPP approaches in the plans and programs of government and various stakeholders will be institutionalized. This includes mainstreaming CSPP in the Comprehensive Development Plans (CDPs) to highlight the important role of LGUs and local special bodies in conflict prevention and peacebuilding. The Office of the Presidential Adviser on the Peace Process (OPAPP), with the Department of the Interior and Local Government (DILG) will develop various online knowledge products, including the facilitators' manuals and guidebooks on mainstreaming CSPP in the CDPs of conflict-affected and conflict-vulnerable LGUs. As part of the new normal, the LGUs will explore online schemes of reporting their CSPP mainstreaming and coaching efforts to the national government.

The government will develop and continuously implement action plans to ensure the protection and promotion of rights of women, youth, and children in conflict situations and against radicalization and violent extremism. These include the National Action Plan on Women, Peace, and Security (NAP-WPS), the National Action Plan on Youth, Peace and Security (NAP-YPS), program framework and work plan for the implementation of the Special Protection of Children in Situations of Armed Conflict Act (RA

11188), and the National Action Plan to Prevent/Counter Violent Extremism (NAP-PCVE).

Priority interventions under these plans will complement the national, regional, and local efforts to address the impact of the COVID-19 pandemic, and will be aligned with the rule of law, international human rights law, and international humanitarian law.

NAP-WPS. A major goal of the NAP-WPS is to ensure the meaningful participation and leadership of women and girls as active change agents in conflict transformation and post-conflict development. It seeks to protect women and girls' human rights at all times—before, during, and after various conflict situations—and prevent all forms of violence against them. It also embodies the government's commitment to implement United Nations Security Council Resolutions (UNSCR) 1325 and 1820,⁹ and other related resolutions. For the remainder of the Plan period, the National Steering Committee on Women, Peace, and Security, through its member agencies and local stakeholders, will target the implementation of the action points identified in the Agency Strategic Action Plans. These include mainstreaming of the WPS agenda in policies, plans, and programs at the national, regional, and local levels; the localization of the NAP-WPS through the crafting of respective regional action plans, the development and implementation of programs to address gender-based violence in emergencies (e.g., those affected by the *Marawi* crisis), and ensuring that former women rebels and violent extremists can benefit from normalization and reintegration programs.

NAP-YPS. The crafting of the NAP-YPS is in compliance with the UNSCR 2250¹⁰ on the YPS agenda. The NAP-YPS will outline the country's YPS agenda based on the recommendations from the Youth Peace Tables, which serve as a

⁹ UNSCR 1325 was adopted in October 2000, affirming that “peace and security efforts are more sustainable when women are equal partners in the prevention of violent conflict, the delivery of relief and recovery efforts, and in the forging of lasting peace.” UNSCR 1820 was adopted in June 2008, recognizing sexual violence as a tactic of war that “can significantly exacerbate situations of armed conflict and may impede the restoration of international peace and security.”

¹⁰ UNSCR 2250 was adopted in December 2015, recognizing that “young people play an important and positive role in the maintenance and promotion of international peace and security.”

platform for young peace advocates to further strengthen their capacities in building a culture of peace and conflict sensitivity and mobilize a youth constituency to support the peace processes. The NAP-YPS also aims to guide both policymakers and service-providers in integrating and adopting the action points in the formulation and implementation of policies and programs that will address or contribute to addressing the needs articulated by the youth. Other related efforts on the NAP-YPS include capacity-building for national government agencies (NGAs) on UNSCR 2250, and mapping of different youth-related programs and projects of the government and non-government organizations.

Implementation of RA 11188. The Special Protection of Children in Situations of Armed Conflict Act seeks to strengthen protection mechanisms for children, involved in affected, and displaced by armed conflict situations, including guaranteeing their rights in situations of armed conflict and providing preventive measures against recruitment, use, and grave child rights violations, prosecution, and rehabilitation and reintegration.

The law declares children as “zones of peace” – hence, treatment will extend beyond territorial and geographical boundaries and will focus on the promotion and protection of their rights at all times. An Inter-Agency Committee on Children in Situations of Armed Conflict (IAC-CSAC) was created to oversee the implementation of this law. For the remainder of the Plan period, all activities for the development of a work plan for this law will proceed, utilizing alternative strategies, in consideration of the current public health situation.

These activities include policy advocacy and dissemination, risk communications, and community engagements through online platforms; conduct of regular online coordination meetings to enhance and finalize the work plan, and increasing partnerships with NGAs and

international development partners, particularly in updating and enhancing CSAC protocols on the handling and management of children involved in armed conflict.

NAP-PCVE. The NAP-PCVE will continuously be implemented to address the various factors of radicalization which lead to violent extremism. This is to ensure that recurrence of armed conflict will be avoided, and public order and safety is ensured particularly at the grassroots level (*see Chapter 18*).

Continue to build on the gains of the peace processes through education, social healing, and reconciliation. Instilling a culture of peace (COP) and non-violence will sustain the gains of the peace process and ensure that legitimate grievances can be raised without resorting to armed conflict and violent extremism. The government will continue and expand the mainstreaming of peace education and promote a culture of peace and non-violence in both formal and non-formal settings. These include the integration of peace education in basic, higher, and technical and vocational education and integration of Mindanaoan narratives from IPs, Bangsamoro Filipinos, and Filipino Christian migrants into the Philippine Educational System. This will be coupled with advocacy programs, capacity-building for faculty, and development of syllabi and training materials for peace studies in higher education. Development of online learning materials and capacity-building modules for COP and peace education mainstreaming will also be pursued as part of the new normal situations. Other COP sessions will be conducted, firmly adhering to prescribed health standards and protocols. The government will actively undertake social healing, reconciliation, and peacebuilding programs. For example, the implementation of reintegration and rehabilitation programs for former violent extremists (FVE) through the Task Force *Balik Loob* (TFBL) will be conflict-, gender-, and culture-sensitive. These will also include various programs and projects

such as provision of safe spaces for healing and reconciliation of FVEs and their families, families of survivors and victims of conflict-related violence, and the communities. Furthermore, the building and rebuilding of relationships of the IDPs with their community leaders, sectoral

representatives, NGAs, LGUs, CSOs, and all stakeholders is expected to build social cohesion, resilience, and sustainable peace towards the recovery and rehabilitation of *Marawi* and its nearby municipalities.

Legislative Agenda

To achieve the desired outcomes discussed above, the following legislative agenda will be pursued in the remainder of the Plan period.

Table 17.1 Legislative Agenda to Attain Just and Lasting Peace

LEGISLATIVE AGENDA	RATIONALE
Separate amnesty proclamations for the Bangsamoro, RPMP/RPA/ABB, and former rebels of the communist terrorist groups	The proposed presidential proclamations on amnesty for various groups aim to accept former combatants back into the fold of the law and eventually, provide them access to the government's socioeconomic services as a means to attain peace, reconciliation, and unity in the country.
Enabling law creating an autonomous region in the <i>Cordilleras</i>	This aims to establish a political entity and provide the structure of its government, in recognition of the justness and cause of the <i>Cordillerans</i> and to secure their identity and posterity and allow for meaningful governance.
Enabling law creating the National Transitional Justice and Reconciliation Commission for the Bangsamoro (NTJRB)	The proposed law will create the NTJRCB which shall design and supervise the implementation of a TJR program. The program shall be guided by dealing with the past framework that respects, protects, and fulfills the victims' rights to truth, justice, and reparation, and ensures the State's obligation to provide guarantees of non-recurrence.

18 Ensuring Security, Public Order, and Safety



Ensuring Security, Public Order, and Safety

The realization of the Filipino people's long-term vision of a *matatag, maginhawa, at panatag na buhay para sa lahat* rests upon an environment that is safe, secure, and orderly. It is the government's duty to ensure that all Filipinos feel secure to walk and travel around all places in the country, without fear of harm to themselves and their property, and are able to go about their business, economic, and social pursuits. Moreover, as the country pursues greater economic development, it is imperative that the government safeguards national interests, territory, and sovereignty.

In the first three years of the Duterte Administration, efforts towards building a safe, secure, and orderly Philippines were intensified. While significant strides have been made in terms of putting in place structural reforms and various mechanisms in the security sector, recurring challenges persist and new threats to public safety have emerged. The protection of our country's entitlements, not only in the West Philippine Sea, has been one of the most pressing security concerns facing the country. Criminality and illegal drugs remain a prevalent threat to public safety, along with the increased frequency of natural disasters, isolated occurrences of human-induced disasters, and outbreak of diseases.

For the remainder of the Plan implementation, the government will maintain its independent and principled foreign policy. The government will strengthen the capabilities of its security forces to ensure that Philippine territories and sovereignty is defended. It will also remain committed in its campaign against all forms of criminality, illegal drugs, transnational crimes, trafficking-in-persons, and violent extremism. During times of health emergencies, the whole security sector will be mobilized to adequately respond to the needs of the people, including the provision of support to sectors that bring food, basic necessities, and essential services to them. Furthermore, the government will upgrade its systems and operations to conform to the new normal in keeping public order and safety. The protection of human rights, as enshrined in the Constitution, will be ensured, especially during the implementation of policies and measures in times of crisis and emergencies.

Assessment and Challenges

Assessment: Successful negotiations for the formulation of the “Association of Southeast Asian Nations (ASEAN) - China Code of Conduct in the South China Sea” have been pursued to ensure security and stability in the region. Various efforts have been exerted to engage claimant states and to promote a rules-based regime in the “South China Sea (SCS),” including the Single Draft Code of Conduct (COC) Negotiating Text, which will inform the formulation of the COC. The crime situation has generally improved with the reduction of average monthly index crime rate and the improvement of index crime solution efficiency rate from 2016 to 2018. A holistic approach, involving community and civil society groups, to the campaign against illegal drugs was introduced through the issuance of Executive Order (EO) 66, s. 2018, which institutionalized the Philippine Anti-illegal Drugs Strategy.

Challenges: Managing conflict and reducing tensions among claimant states of the SCS, continue to be the main challenge to external security. Various emerging and non-traditional threats such as radicalization, violent extremism, and increasing risks to disasters and health hazards continue to threaten the safety of Filipinos.

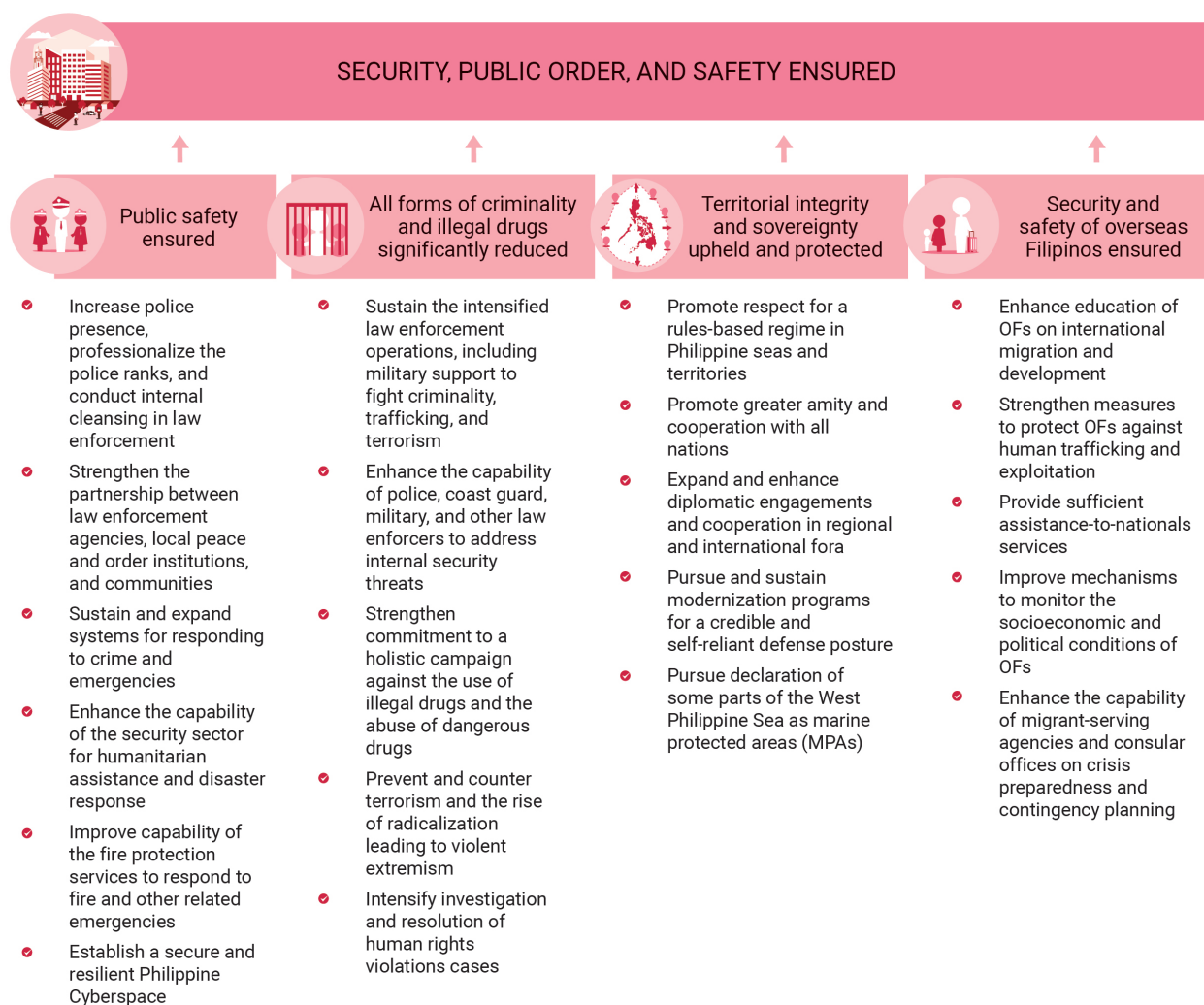
The outbreak of COVID-19 has posed another challenge to ensuring security and safety of the people. Despite the continued reduction in reports of criminal incidents even during the implementation of the community quarantine, law enforcement operations are stifled by the need to observe strict health protocols amidst limited supply of personal protective equipment (PPE), exposing enforcers to risk. On the other hand, incidence of cybercrimes is on the rise with the increased digital dependency of the public for financial and government transactions. The imposition of quarantine protocols also demands greater accountability from the government to ensure that human rights are protected and upheld.

Strategic Framework

Ensuring security, safety, and public order is one of the foundational strategies in the Philippine Development Plan (PDP) 2017-2022, hence it is accorded high priority by the current administration. Achieving this goal will entail

pursuing the following strategic outcomes taking into consideration the new normal situation brought about by the COVID-19 pandemic, as shown in Figure 18.1 below.

Figure 18.1 Strategic Framework to Ensure Security, Public Order, and Safety



Note: Refer to Migration on Chapter 21 for strategies relating to overseas Filipinos (OFs).

Strategies

Ensuring public safety

The government will continue to exert efforts in building the capabilities of public safety institutions to respond to all hazards, including pandemics, that pose risks to the safety of the people. This will include interventions in preventing the spread of radicalization resulting in violent extremism. The following strategies will be implemented to raise the standards for public safety.

Increase police presence, professionalize the police ranks, and conduct internal cleansing in law enforcement. Efforts to enhance police presence to maintain peace and order is primordial. As such, the Philippine National Police (PNP) will strive to meet the standard police-to-population ratio of 1:500 to greatly improve public safety. In addition, the government will pursue the construction of additional police stations in every community to further strengthen and expand their presence. To enhance police presence in communities, various programs and activities, such as *Pulis Nyo Po sa Barangay*, Barangay Peacekeeping Action Teams, and Barangay Information Networks, will be organized and empowered as force multipliers for the PNP. Moreover, the Community and Service-Oriented Policing (CSOP) System will be strengthened to help build ties between the PNP and communities and to strengthen the involvement of the latter in addressing public safety issues such as crime, social disorder, and fear of crime.

The PNP will continue its efforts in sustaining internal discipline within their ranks through the implementation of the Revitalized Internal Cleansing Strategy, with particular focus on getting rid of incompetent and corrupt police personnel. Reporting platforms such as the Integrity Monitoring and Enforcement Group (IMEG) Hotline aimed at receiving complaints and information from the public about erring police officers will also be sustained. Disciplinary actions and sanctions will be strictly imposed on those involved in corruption and other unlawful activities.

The Philippine Public Safety College and PNP will continue to institutionalize a highly efficient, competent, credible, and professionalized corps of peace and order and public safety personnel through the conduct of mandatory courses, specialized and in-service training, and continuing quality education and training to PNP uniformed personnel. Online training programs and digital platforms will form integral parts of the learning process during this pandemic situation.

Being at the frontline of the pandemic and other crisis situations, the police force will be equipped with adequate logistical support for its operations and be provided with sufficient PPE. This is to ensure the safety and protection of the police forces while performing their duty of upholding the rule of law to maintain peace and order and public safety in the middle of a public health crisis.

Strengthen the partnership between law enforcement agencies, local peace and order institutions, and communities. LGUs will continuously strengthen local peace and order institutions to effectively address criminality and illegal drugs within communities. Maintaining peace and order and discipline in communities is of utmost importance, as quarantine restrictions adversely affect the economy and people's livelihood and income. To this end, the government will capacitate local government unit (LGU) officials, especially those at the barangay level, as force multipliers and frontliners in the fight against COVID-19. Capacity-building interventions will include developing protocols on checkpoints and enforcement of community quarantine guidelines. The PNP will support other sectors, particularly those involved in supply chains, to ensure unhampered distribution of food and other essential goods, including medical supplies and equipment. Together with the Department of Interior and Local Government (DILG), the PNP will also develop a concise rules of engagement with their civilian counterparts.

Sustain and expand systems for responding to crime and emergencies. The implementation of the 911 Emergency Hotline Service, which serves as the direct access of the people to the government, will be sustained. The DILG will expand its coverage to better serve and respond to emergencies in the countryside. Moreover, training programs for telecommunicators and responders will be provided.

In response to challenges arising from the new normal, the DILG, the Department of Health (DOH), and other relevant security sector agencies will expand the utilization of internet and mobile-based reporting channels. This will enable frontliners to respond in a timely manner to the information and security needs of the public under the new normal.

Enhance the capability of the security sector for humanitarian assistance and disaster response. To enable security sector agencies to effectively respond to natural and human-induced disasters, the National Disaster Risk Reduction and Management Council (NDRRMC) through the Office of Civil Defense (OCD), will continue to provide capacity-building programs for disaster responders such as the National Urban Search and Rescue (USAR) Capacity Building. In support of this, by the fourth quarter of 2020, the DILG is expected to implement the Safe Philippines Project Phase I which will provide police, public safety institutions, and emergency response units with the latest technologies and equipment on surveillance and monitoring, with its own integrated operations and command center, and a remote back-up center. This will allow them to predict, detect, prepare for and quickly respond to incidents, and mitigate and respond to disasters promptly. The security sector shall also continue to build its capacities to qualify for International Search and Rescue Advisory Group's (INSARAG) external classification, to be recognized for international response support.

In view of the new normal, the OCD will augment the Human Resources for Health through the establishment and mobilization of a pool of medical and allied health professionals and volunteers from the security sector. These personnel will

provide support in the implementation of social support programs, especially during public health emergencies. Duty bearers in the security sector will be capacitated on providing medical/paramedic services to enable and intensify the conduct of contact tracing and early detection.

In line with the implementation of the National Action Plan on Women, Peace, and Security (NAP-WPS) 2017-2022, which acknowledges the vulnerability of women in emergency situations, the government will strengthen the coordination and harmonization of protection and rehabilitation initiatives for women and girls in various emergencies. It will also develop comprehensive gender- and culturally- sensitive disaster risk reduction and management programs that specifically highlight the context and vulnerabilities of women during emergencies, including women in frontline agencies.

Furthermore, the passage of the bill to establish the Department of Disaster Resilience will be actively pursued in the Congress. The bill will strengthen the coordination among agencies in providing response during emergencies and disasters. The bill should also be revisited to explicitly specify public health emergencies such as pandemics as disaster events, and identify measures that will enable the government to mitigate the impacts of such emergencies and to respond effectively. Meanwhile, the National Disaster Risk Reduction and Management Plan (NDRRMP) will be revisited to reflect the aforementioned aspects, among others.

Improve capability of the fire protection services to respond to fire and other related emergencies. To safeguard life and property, as well as the country's vital and critical infrastructure, the capability of the Bureau of Fire Protection (BFP) will be strengthened. This includes fast-tracking the modernization of fire protection services and the implementation of the BFP service upgrade and capability upgrade programs. This will include the hiring of additional personnel and procurement of firefighting and communication equipment and fire trucks to service communities. The modernization programs of the BFP will likewise cover the procurement of PPE and other safety equipment for

firefighters during operations, especially those at the frontline providing assistance during pandemic response and other emergency situations. Strict compliance with health protocols and standards will be observed during operations to ensure not only the safety of the public, but also of the firefighters.

The capacity of the BFP to enforce the Fire Code and respond to fire and other related emergencies will be further strengthened. Priority will be given to urban areas with low firefighter-to-population ratio and to LGUs with inadequate fire protection services. Moreover, pursuant to DILG Memorandum Circular 2019-121, roads will be cleared of obstructions to ensure the smooth and quick access of responders.

Establish a secure and resilient Philippine cyberspace. The Department of Information and Communications Technology (DICT) will ensure the successful implementation of the National Cybersecurity Plan (NCSP) 2022, which aims to protect the critical information infrastructure, government networks, supply chains, and individuals and establish programs and platforms for local and international cooperation in cybersecurity. The strategic initiatives of the NCSP will include enhancing security resilience of critical information infrastructure, government, public, and military networks, to deal with sophisticated attacks, promoting the adoption of cybersecurity measures among individuals and businesses, and enhancing and expanding the pool of local cybersecurity experts.

To better address the challenges to cybersecurity arising from the new normal, a strategic defensive posture within the Office of the President (OP) will be established. This will be complemented by the strengthening of the country's capability to protect the National Critical Information Infrastructures and improve its cyber resiliency through cybersecurity assessment and compliance and national drill exercises. The government will build the skills and capabilities of local cybersecurity experts, strengthen cooperation between law enforcement, cybersecurity experts, academe, and the private sector, and improve cybersecurity awareness through the conduct of National Cybersecurity Awareness Month, engagements

with non-government organizations (NGO) and other stakeholders, and employing social media, as means for disseminating information.

Significantly reducing all forms of criminality and illegal drugs

The government remains committed to its campaign against all forms of criminality and illegal drugs. Likewise, the government recognizes the need to address the spread of radicalization and violent extremism that leads to terrorism, transnational crimes, and other non-traditional threats that pose risks to public safety. The conduct of law enforcement operations will need to consider new challenges brought about by the current pandemic. The following strategies will be pursued.

Sustain the intensified law enforcement operations, including military support, to fight criminality, trafficking, and terrorism. The PNP will sustain its efforts in reducing all forms of criminality and intensified crime prevention measures even amidst the pandemic. This will involve updating of existing and/or developing new policies, manuals, and procedures to ensure compliance with pertinent laws and human rights standards, particularly on crime investigations including those for missing persons, case documentation and filing, and harmonization of inter-agency procedures. Coordination between law enforcers and military, especially during conduct of operations, will also be enhanced.

To address the challenges under the new normal, standard procedures for law enforcement and anti-illegal drug operations will be revised and updated. Health protocols and measures will be incorporated in the procedures to ensure that both law enforcers and criminal personalities are protected from getting infected by the virus. The PNP will also consider using non-lethal weapons and other police equipment in the conduct of police operations, delivery of public safety services, and other law enforcement functions while strictly adhering to the minimum health standards provided by the Department of Health (DOH).

The rollout of the Core Competency-Based Training Program for investigators will strengthen the PNP's investigative capability and contribute to the success of law enforcement operations. Capabilities of police personnel, in case of recording and tracking, case filing and arrest, operational readiness, and disaster and emergency response will also be enhanced. Moreover, the current pandemic brought the need to utilize advanced information and communications technology (ICT) in the performance of PNP's mandate, such as the adoption of secured, mobile, artificial intelligence-driven, and real-time policing. This will harmonize information systems and improve data sharing and coordination within the criminal justice system.

Law enforcement capability on cybercrime detection and investigation will be improved and modernized. This also calls for efforts to increase the general public's awareness on the detection of cybercrimes to protect themselves and avoid being a victim, especially at the height of a pandemic and other crisis situations. Moreover, the DILG will lay down policies to protect and rehabilitate children at risk and children in conflict with the law. This will include developing a manual on handling and treatment of children at risk, as well as preventing trafficking of persons, especially women and children.

The PNP will ensure timely and accurate crime monitoring and reporting through information technology solutions and initiatives. The conduct of a periodic nationwide Crime Victimization Survey will be pursued to augment administrative-based data. In addition, a survey on the perception of criminality and law enforcement will be carried out.

Enhance the capability of police, coast guard, military, and other law enforcers to address internal security threats. Development and full implementation of the modernization programs of the PNP, the Armed Forces of the Philippines (AFP), the Philippine Coast Guard (PCG), the

Bureau of Fisheries and Aquatic Resources (BFAR), and other law enforcement agencies are critical in addressing threats posed by local and transnational terrorists and criminal groups, and emerging security threats, such as cybercrimes. Information and communications capabilities of law enforcement agencies will be strengthened to ensure that they are responsive in addressing such threats. Online trainings may be utilized as the primary mode in implementing capacity-building programs for personnel.

Protection of our porous borders will be ensured through the enhanced interdiction and strengthened presence and capability of the Bureau of Immigration (BI), the Bureau of Customs (BOC), and other agencies mandated to enforce border security. The PCG and BFAR will intensify the conduct of maritime security law enforcement patrols within Philippine territory. The PCG will also pursue the development of maritime detection systems and operationalize the Vessel Traffic Management System to secure the country's maritime jurisdiction.

The threat of global pandemics calls for intensified air and maritime border security and strict imposition of health protocols and quarantine procedures for arriving passengers and visitors. This will be carried out through the installation of modern e-gates and other border control systems, which will also efficiently prevent human trafficking and entry of terrorists, especially in major ports of entry.

Strengthen commitment to a holistic campaign against the use of illegal drugs and the abuse of dangerous drugs. The government will continue to strengthen the conduct of its intensive and unrelenting campaign against the trafficking and use of dangerous drugs¹ and other similar substances through an integrated system of planning, implementation, and enforcement of anti-drug abuse policies, programs, and projects. In doing so, the government will aim to achieve a

¹ Dangerous drugs include those listed in the schedules annexed to the 1961 Single Convention on Narcotic Drugs, as amended by the 1972 Protocol, and in the schedules annexed to the 1971 Convention on Psychotropic Substances as enumerated in the annex, which is an integral part of the Comprehensive Dangerous Drugs Act of 2002 (RA 9165).

balance in its national drug control program, so that people with legitimate medical needs will still have access to dangerous but licit drugs, subject to the prescription of appropriate medication.

Central to the government's campaign is to address the country's illegal drug use problem through the Philippine Anti-Illegal Drugs Strategy (PADS). The PADS recognizes the need for a holistic, human rights-based approach in addressing the problem on illegal drugs production, trafficking, and use. The strategy entails a comprehensive and balanced approach to drug demand and drug supply reduction. This involves the suppression of the flow of illegal drugs supply through sustained law enforcement operations and reduction of consumer demand for drugs and other illegal substances through drug rehabilitation and massive preventive education and awareness programs.

In support of the implementation of the PADS pursuant to EO 66, s. 2018, all government agencies, including government-owned and controlled corporations and state universities and colleges, are mandated to formulate their respective implementing and operational plans. This will include programs and activities to ensure a drug-free workplace, including those in the private sector. The strategy also calls for the support of LGUs through the strengthening of Anti-Drug Abuse Councils (ADAC), conducting barangay drug clearing operations, and appropriating funds for anti-illegal drugs programs and projects. The EO also prescribes the conduct of a nationwide survey to determine the extent and magnitude of drug abuse prevalence in the country. In addition, the establishment of an age- and sex- disaggregated database and secure database for dangerous drugs operations will ensure transparency and enable an effective monitoring of the implementation of the government's fight against dangerous drugs.

The Philippine Drug Enforcement Agency (PDEA) will also intensify the random drug testing in the transportation sector as a preventive effort against drug-related road traffic accidents. It will enjoin

all government agencies through the Inter-Agency Committee on Anti-Illegal Drugs, as created through EO 15, s. 2017, to ensure that the anti-illegal drugs campaign is implemented in an integrated and synchronized manner.

Prevent and counter terrorism and the rise of radicalization leading to violent extremism. To address communist terrorist groups, the National Task Force to End Local Communist Armed Conflict (NTF-ELCAC) will intensify the implementation of the whole-of-nation approach at the regional and local levels. This will require strong coordination between regional and local development and peace and order councils, as well as the commitment and support of local chief executives and the communities.

Following the adoption of the National Action Plan on Preventing and Countering Violent Extremism (NAP-PCVE),² various national government agencies (NGA) will be capacitated, particularly on the formulation of their respective agency's PCVE plans that are aligned with the NAP. In the same manner, the LGUs will be capacitated on the preparation of their local plans that will adopt and translate national strategies into concrete action at the grassroots level, taking into consideration the current health crisis and other emerging threats to peace and order and public safety. These plans will include programs aimed at addressing the political, economic, cultural, psychosocial, and religious factors of radicalization that lead to violent extremism. The government will pursue a comprehensive and people-centered approach in addressing drivers of radicalization and ensure that such plans are conflict-, culture-, and gender- sensitive, uphold the rule of law, and are compliant with international human rights law and international humanitarian law.

The government's efforts to prevent violent extremism and terrorism will be further intensified to maintain community resilience, especially during pandemics and other public health emergencies.

² Adoption of the NAP-PCVE is pursuant to the Anti-Terrorism Council's Resolution No. 38, s. 2019.

The cooperation of the citizens, private sector, and NGOs with the government's efforts on PCVE will build a strong and solid front against violent extremists, which may lead to their possible containment and neutralization.

The government will continue to deepen partnerships with the international community through multilateral and bilateral mechanisms such as mutual legal assistance agreements, global cooperation, and international law enforcement arrangements (e.g., International Criminal Police and joint law enforcement operations). This will also include intensified government and multisectoral efforts against domestic and transnational trafficking in persons through international partnerships and the Inter-Agency Council Against Trafficking.

Intensify investigation and resolution of human rights violations cases. Investigation strategies and approaches to strengthen case build-up will be further strengthened to ensure successful prosecution of human rights violation cases. The Commission on Human Rights (CHR) will pursue efforts to empower the poor, marginalized, vulnerable, and disadvantaged to seek response and remedies for injustice through the development of client-based education and training programs. These will include developing learning modules, teaching aids, and education materials and organizing and mobilizing a network of public support for the conduct of human rights events, utilizing primarily digital platforms and mechanisms during the pandemic. Partnerships with state and non-state duty bearers in addressing human rights violations cases will also be pursued. Furthermore, the NAP-WPS will pursue the protection of human rights of women and girls at all times and the prevention of gender-based violence.

In line with the international human rights law, which mandates that duty-bearers not derogate from their obligation to respect, protect, and fulfill human rights even in times of emergencies, a human-rights based approach will be followed in the implementation of relevant laws, policies, protocols, and guidelines. The government will ensure that constitutionally-enshrined human rights are upheld

and protected, and that violators will be treated humanely in the enforcement of community quarantine procedures and protocols amidst the pandemic situation. Updating of standard procedures for law enforcement operations must adhere to human rights standards while ensuring health protocols to protect both the suspects and the law enforcers from getting infected by the virus.

Upholding and protecting territorial integrity and sovereignty

Deescalating tension and resolving disputes in the SCS continue to be the main challenges in sustaining stability and security in the region. To uphold and protect territorial integrity and sovereignty, the following strategies will be implemented:

Promote respect for a rules-based regime in Philippine seas and territories. The government will sustain efforts that promote respect for legal and diplomatic processes in clarifying issues and resolving disputes on maritime jurisdictions, in accordance with international law, particularly the 1982 United Nations Convention on the Law of the Sea (UNCLOS). Central to this is the push for an effective and substantive ASEAN-China COC that will guide actions of claimant-states to avoid activities that raise tension or threaten security and stability in the SCS. On the other hand, the Philippines remains committed to taking necessary diplomatic interventions against actions that run counter to international laws and principles, including the UN Charter, the 1982 UNCLOS, and the 2002 ASEAN-China Declaration on the Conduct of Parties in the SCS, to preserve national security and maintain peace and stability in the region. The government will continue to enhance its relations with other claimant countries such as China, but with the consciousness of the need to protect the country's rights and interests in the West Philippine Sea, as recognized under the foregoing international instruments and the 2016 Award of the Arbitral Tribunal on the SCs arbitration case.

In addition, the government will pursue negotiations of maritime boundary delimitation agreements with countries the Philippines shares borders with. Further, dispute settlement mechanisms consistent with international law will be pursued for the settlement of maritime border delineation and outstanding territorial claims.

Promote greater amity and cooperation with all nations. The country will continue to enhance and strengthen existing bilateral relations, alliances, strategic partnerships, and defense cooperation, while expanding bilateral diplomatic engagements. The government will maximize existing platforms and pursue alternative platforms to maintain diplomatic engagements with its bilateral and multilateral partners and strengthen cooperation towards addressing the impact of public health emergencies such as pandemics.

Expand and enhance diplomatic engagements and cooperation in regional and international fora. The country will strengthen relationships at the regional level. Aside from the existing Trilateral Cooperative Agreement with Indonesia and Malaysia, which contributed to the enhanced stability in the Sulu-Celebes Seas, the Philippines will continue to engage ASEAN through its various platforms towards promoting joint patrols, maritime exercises, intelligence cooperation, regional security, and stability. It will also strengthen cooperation to effectively manage the current and avoid future pandemic situations.

Pursue and sustain modernization programs for a credible and self-reliant defense posture. The establishment of a credible and self-reliant defense posture is critical to the protection and preservation of the country's territorial integrity, sovereignty, and sovereign rights. Thus, the government will fully implement the AFP Modernization Program and the AFP Capability Upgrade Program by ensuring continued budgetary support to these programs. Air and maritime domain awareness will likewise be intensified through the conduct of law enforcement

patrols and operations in Philippine maritime jurisdiction, as well as the establishment of domain awareness platforms. Various structures that can be used for territorial defense operations, marine resource protection, information gathering, and civilian purposes will be established to strengthen the AFP's presence in Philippine-owned islands and features. Moreover, the AFP will strengthen the Reserved Forces and the Reserved Officers Training Corps (ROTC) Program to augment its numbers, especially during crisis situations.

Pursue declaration of some parts of the West Philippine Sea as marine protected areas (MPAs).

The government will pursue this strategy to address environmental degradation and to ensure food security and the livelihood of fisherfolk who depend on the area. Pursuant to existing domestic laws, specifically the Expanded National Integrated Protected Areas System Act of 2018 (RA 11038), the management and enforcement of MPAs will be the mandate of the military and relevant civilian NGAs, local communities, and NGOs. Towards this end, the government will acquire sea vessels to aid navigation, construct and maintain bases, support organization and operations of *bantay-dagat*, and conduct marine scientific research in these areas. While MPAs are considered national initiatives, the Philippines will also pursue cross-border and multilateral or regional cooperation with neighboring countries for more effective administration and management of the oceans.

Ensuring security and safety of overseas Filipinos

Armed conflicts, economic instabilities, and social tensions in other countries continue to put the welfare and safety of all Filipinos overseas at risk. Strategies to ensure the security and safety of overseas Filipinos are discussed thoroughly in Chapter 21.

Legislative Agenda

To support the implementation and effectiveness of the strategies, legislative action is needed on the following:

Table 18.1 Legislative Agenda to Ensure Security, Public Order, and Safety

LEGISLATIVE AGENDA	RATIONALE
<i>Territorial integrity and sovereignty upheld and protected</i>	
National Defense Act	This will update and define key national defense policies, principles, and concepts. It will codify the various issuances concerning national defense, the AFP, and the civilian bureaus in the DND with the aim of streamlining and professionalizing the defense bureaucracy through the institutionalization of reforms. It will prohibit the sale of defense real properties; redefine the minimum and maximum tenure in key positions to provide stability in the AFP leadership, implement mandatory military service for all natural-born or naturalized Filipino citizens for a minimum of two years, and transform the National Defense College of the Philippines into the National Defense University of the Philippines, among others.
Defense Acquisition Act	This proposed legislation will exempt all acquisition of defense equipment, materiel, ordinance, and integrated military systems of the Department of National Defense (DND) and its attached bureaus from the regular procurement process bounded by the Government Procurement and Reform Act (GPRA).
National Security Code	This measure seeks to institutionalize the national security planning process. This aims to address the required regular preparation of a National Security Policy and a National Security Strategy and identify how the government will implement the policy and strategy.
Philippine Defense Industry Development Act	This bill will promote and stimulate the local defense industry, as in-country enterprises will be entitled to avail incentives under the Omnibus Investments Code (EO 226, s. 1987). The proposed law places premium in encouraging local industry players to invest in developing in-country defense capabilities. The industry players may avail of credit and other financial products extended by government financial institutions and enjoy exemption from customs duties and national internal revenue taxes that are payable on the importation of raw materials and critical components. The government will promote the export of locally made defense materiel and the in-country enterprises to other countries.
Philippine Maritime Zones Act	This will serve as a general declaration of the maritime zones under the sovereignty and jurisdiction of the Philippines. It will also provide the necessary foundation and framework for the enactment of subsequent laws pertinent to the rights and obligations of the Philippines over its maritime zones.
Philippine Archipelagic Sea Lanes Act	The proposed law will establish archipelagic sea lanes in Philippine archipelagic waters and the adjacent territorial sea. It will likewise prescribe the rights and obligations of foreign ships and aircraft that exercise the right of passage through the established archipelagic sea lanes. The bill will also determine and put in place appropriate measures for the protection of areas along said sea lanes, in accordance with international conventions and agreements to which the Philippines is a party.
<i>All forms of criminality and illegal drugs reduced</i>	
PNP Revitalization and Capability Enhancement Act	This will enhance the capabilities of the PNP through infrastructure and facilities development, as well as equipment acquisition and upgrading.

LEGISLATIVE AGENDA	RATIONALE
Forensic Deoxyribonucleic acid (DNA) Database Act	The bill will give way for the establishment of a DNA database system for the collection, storage, and maintenance of genetic identification information for law enforcement purposes.
Anti-Drug Abuse Council Law	This will institutionalize the creation of Anti-Drug Abuse Councils in every local government unit. It provides for the corresponding budget allocation for the operations of the Councils and the conduct of other anti-illegal drug activities, among others.
Amendment of the Comprehensive Dangerous Drugs Act of 2002	This will allow for the mandatory drug testing of students in the secondary and tertiary levels and the forfeiture of properties involved in drug cases in favor of the Philippine Drug Enforcement Agency (PDEA). The amendment will also prescribe stronger penalties to those found guilty of trafficking dangerous drugs, provide for the destruction of seized dangerous drugs and controlled precursors and essential chemicals, and restore plea bargaining and probation laws. It will also strengthen the PDEA as an organization, including the provision of benefits for personnel, among others.
Public safety ensured	
BFP Modernization Act	This intends to modernize the BFP and enable it to become a fire and emergency medical and rescue services agency capable of responding to hazards, such as destructive fires, accidents, and other natural and human-induced disasters. It will strengthen the ongoing modernization of the BFP and give them the power to investigate all causes of fire, and if necessary, file proper complaints.
Amendment of the Fire Code	This aims to amend certain provisions of the Revised Fire Code of the Philippines of 2008 (RA 9514) and clarify the respective authorities and jurisdictions of the BFP, the Philippine Economic Zone Authority (PEZA), and other similar entities on the enforcement of the law within economic zones. It will give the BFP the sole responsibility to administer and enforce the Fire Code. It also expands the utilization of the Fire Code Fees collections for the acquisition of properties of fire stations. It also provides more stringent penalties for every act that compromises fire safety and endangers the lives and limbs of Filipinos.
Disaster Resilience Bill	This proposed measure seeks to establish a Department of Disaster Resilience with sufficiently high level of authority to lead the coordination, monitoring, oversight, and implementation of disaster risk reduction and management efforts. The proposed Department will be equipped with the necessary competency and resources to engage new actors, particularly in the field of risk transfer and insurance and build the necessary structure to manage broader governance programs. The current version of the bill should also be revisited to explicitly specify public health emergencies, such as pandemics as disaster events and to identify measures that will enable the government to mitigate the impact of such emergencies and respond effectively.
Mandatory ROTC Program	<p>This will address the decline in the number of students taking up ROTC, which resulted in the insufficient number of reserve officers and personnel for the AFP that may be tapped in times of need. The proposed law seeks to revive the mandatory nature of the ROTC.</p> <p>The re-establishment of mandatory basic ROTC Program will form part of the basic curricula for Senior High School (Grades 11 and 12) in public and private schools and a requisite for graduation. The program aims to enhance the students' consciousness in the ethics of service, patriotism, and nationalism, military training for national defense preparedness and civil military operations, and civic training for disaster risk reduction and management, human and civil rights awareness, and law enforcement.</p>

19

Accelerating Infrastructure Development



Accelerating Infrastructure Development

The Build, Build, Build (BBB) Program managed to overcome several implementation challenges in the first half of the Plan period, having increased infrastructure spending to more than five percent of the gross domestic product (GDP) in 2018, twice more than the average spending over the past five decades. The progress of the Program is a confirmation of the government's strong resolve to strategically and decisively improve the country's infrastructure through the development of a robust pipeline of massive capital investments, including priority high-impact projects, and the implementation of game-changing reforms.

The unprecedented challenges brought by the COVID-19 pandemic, however, is expected to alter the overall infrastructure development agenda. The resource requirements of the response to the pandemic is expected to reduce the fiscal space initially allotted for the portfolio of investments and could slow down the movement and implementation of programs and projects. On the other hand, the government is also keen in using BBB as an instrument for socioeconomic recovery.

The resumption of rollout of activities under the BBB Program and the continuous investment in infrastructure are vital to stimulating the economy and facilitating recovery with their potential multiplier effects on creating jobs and stimulating growth. Bolstering infrastructure is instrumental in ensuring business continuity, development of agglomeration economies, creation of new urban centers, delivery of essential government services, and transitioning into the digital economy. Accordingly, the government reassessed its strategies and targets for the remaining Plan period to ensure that these remain relevant and achievable in the face of the "new normal" and in pursuit of a healthy and resilient Philippines. Even while facing constraints brought about by the pandemic, government will remain mindful of the longer-term development goals requiring early interventions.

Assessment and Challenges

Assessment: During the first half of Plan implementation, frameworks, laws, and policies were introduced for various infrastructure sub-sectors: (a) National Transport Policy (NTP) and its implementing rules and regulations (IRR);

(b) streamlining of regulatory procedures for energy projects; (c) formulation of the framework for use of energy-efficient technologies; (d) enactment of the means to lower electricity costs; (e) adoption of the framework for the Public

School of the Future; (f) Philippine Health Facility Development Plan to guide and ensure the rational allocation of investments for public health facilities, upgrading and development, including the Health Facilities Enhancement Program; and (g) government-initiated investments in the enhancement of the digital infrastructure through the National Broadband Program.

Challenges: The COVID-19 pandemic has posed serious challenges to resource mobilization and implementation of the BBB Program, particularly in terms of: (a) availability of fiscal space for the target infrastructure program; (b) conceivable delays in project preparation, procurement, and/or implementation due to disruption of work of contractors, professionals/experts/engineers, and workers/laborers involved in the projects; (c) possible interruption of importation of construction materials due to disruption to labor and materials supply; and (d) change in demand for infrastructure services, which could affect the financial viability and

therefore appetite of investors, particularly in public-private partnership (PPP) projects. In addition, increase in costs of infrastructure projects may be expected due to requirements for social distancing and other health precautionary measures and protocols.

Amidst the challenges of the pandemic and transitioning to the “new normal,” the government will have to continue and step up efforts to address increasing demand for infrastructure, especially health and water facilities, which have been and continue to be critical in the fight against COVID-19, right-of-way issues, lack of updated and integrated infrastructure data, and regulatory environment issues. At the same time, the remainder of the reform agenda will still be pursued — creation of an apex body for water resources and an independent economic regulator for water supply and sanitation; and amendments to the National Economic and Development Authority (NEDA) Joint Venture (JV) Guidelines.

Targets

The Plan targets for FY 2020-2022 were revisited and updated considering infrastructure development, as a pivotal strategy to pump-prime the economy and with the strong recognition that each sector of the economy essentially requires infrastructure

emerging from the COVID-19 pandemic and transitioning further into the path of recovery and resiliency. Table 19.1 shows the success indicators and updated targets for infrastructure development.

Table 19.1 Updated Targets to Accelerate Infrastructure Development

INDICATOR	BASELINE VALUE (YEAR)	TARGETS			
		2020	2021	2022	END OF PLAN
Public infrastructure spending increased (in % share in GDP) ¹	4.1 ² (2016)	4.20	5.40	4.50	4.50
Transport Infrastructure					
Road Transport					
Travel time (decreased) via land per key corridor (in hours)					
Metro Manila	2.97 (2016)	3.12	3.11	3.11	3.11
N1/Pan – Philippine Highway (Laoag-Zamboanga)	61.12 (2016)	50.94	48.39	45.84	45.84
Manila – Baguio	7.04 (2016)	5.86	5.57	5.28	5.28
Manila – Pagudpud	13.36 (2016)	11.13	10.58	10.02	10.02
Manila – Cagayan	12.11 (2016)	10.09	9.59	9.08	9.08
Manila – Clark	2.80 (2016)	2.34	2.22	2.10	2.10
Clark – Subic	2.09 (2016)	1.75	1.66	1.57	1.57
Manila – Batangas	3.46 (2016)	2.88	2.74	2.60	2.60
Iloilo – Capiz	2.62 (2016)	2.18	2.07	1.96	1.96
Surigao – Davao	7.10 (2016)	5.92	5.62	5.33	5.33
Butuan – Iligan City	5.80 (2016)	4.83	4.59	4.35	4.35
Cagayan De Oro – Davao City	5.70 (2016)	4.75	4.51	4.27	4.27
Bacolod – Dumaguete – Bayawan	8.46 (2016)	7.05	6.70	6.35	6.35

¹ On July 28, 2020, the Development Budget Coordination Committee (DBCC) adopted via Ad Referendum the revised macroeconomic assumptions and fiscal targets for FY 2020 to FY 2022, in line with the fiscal impact of the COVID-19 pandemic. Accordingly, the government's programmed spending on infrastructure were revised.

² Actual disbursement based on the Department of Budget and Management's (DBM) 2019 Budget of Expenditure and Sources of Financing.

INDICATOR	BASELINE VALUE (YEAR)	TARGETS			
		2020	2021	2022	END OF PLAN
Danao – Cebu – Santander	4.61 (2016)	3.85	3.65	3.46	3.46
Road traffic accident rate reduced (in number of incidents per 100,000 population) - incidents of accidents	10.7 (2016)	10.00	10.00	10.00	10.00
Air Transport					
Air passenger movement increased (in number of passengers, cumulative)	71.54M (2016)	29.42M	32.65M	38.33M	38.33M
Cargo shipped via air increased (international and domestic) (in metric tons [MT], cumulative)	285.86M (2016)	165.54M	277.92M	328.93M	328.93M
Water Transport					
Passengers transported by sea increased (in number of passengers, cumulative)	89.16M (2016)	90.11M	91.66M	93.27M	93.27M
Cargo shipped increased (international and domestic) (in MT, cumulative)	302.68M (2016)	317.92M	325.12M	332.06M	332.06M
Number of vehicles carried by RORO vessels increased	5.50M (2016)	6.70M	6.77M	6.84M	6.84M
Rail Transport					
Passenger trips via rail in Metro Manila increased (in % share to total passenger trips via rail, cumulative)	11 (2014)	16	17	19	19
Energy/Power					
Power requirements met (in % available capacity over peak demand)	144 (2016)	148	147	139	139
Luzon	140 (2016)	143	144	137	137
Visayas	149 (2016)	150	146	137	137
Mindanao	162 (2016)	172	161	150	150
Energy intensity (primary energy) reduced (in tons of oil equivalent per million peso)	6.71 (2016)	5.82	5.66	5.56	5.56
Energy intensity (electricity consumption) reduced (in kWh per million peso)	11.18 (2016)	10.23	10.83	10.84	10.84

INDICATOR	BASELINE VALUE (YEAR)	TARGETS			
		2020	2021	2022	END OF PLAN
Proportion of households (HHs) with electricity to total number of HHs increased (in %, cumulative)	90.70 (2016)	96	98	100	100
Electricity consumption per capita increased (kWh per capita)	879.46 (2016)	1,043.52	1,095.91	1,163.54	1,163.54
Water Resources					
Water Supply and Sanitation					
Proportion of HHs with access to safe water supply to total number of HHs increased (in %, cumulative)	87.60 (2016)	93.11	94.49	95.87	95.87
Proportion of cities/municipalities served by water districts with 24/7 water supply increased (% cumulative)	84.00 (2016)	86.00	88.00	90.00	90.00
Proportion of HHs with access to improved sanitation to total number of HHs increased (in %, cumulative)	91.90 (2016)	94.60	95.28	95.95	95.95
Irrigation					
Cropping intensity increased (in %, cumulative)	143.00 (2016)	164.37	165.50	166.36	166.36
Ratio of actual irrigated area to the total potential irrigable area increased (in %, cumulative)	59.32 (2016)	63.10	65.33	66.73	66.73
Flood Management					
Ratio of flood-protected areas to the total flood-susceptible areas increased (in %, cumulative)	TBD	TBD	TBD	TBD	TBD
Information and Communications Technology					
Average broadband download speed increased (in Mbps)	4.30 (2016)	25.00	30.00	35.00	35.00
Social Infrastructure					
Health					
Proportion of barangays with barangay health stations, rural health units, or urban health centers to the total number of barangays (42,036 as of 2016) increased (in %, cumulative)	70.64 (2017)			72.18	72.18
Solid Waste Management					
Number of barangays served by materials recovery facilities	13,149 (2016)	21,018	23,119	25,221	25,221
Number of local government units (LGU) served by sanitary landfills (1,634 LGUs)	248 (2016)	434	456	479	479

Strategic Framework

Infrastructure development is an important bedrock strategy that contributes to enhancing the social fabric, reducing inequality, and increasing the country's growth potential, enabling all other development strategies to work effectively. The aspiration of a healthy and resilient Philippines entails envisioning the country's strategic infrastructure development post-pandemic with

the BBB Program as a major growth lever to hasten the country's recovery and provide a more solid foundation for resiliency. The outcomes and major strategies for the rest of the Plan period were carefully revisited and updated to better facilitate the transition and adaptation to the new normal, propel economic activities, and lay the foundation for extended growth.

Figure 19.1 Strategic Framework to Accelerate Infrastructure Development



Strategies

With the continuous reopening of the domestic markets and gradual lifting of restrictions, the government will prioritize the continuous resumption of the BBB Program, which is envisaged as a key element in bringing the much-needed impetus to help the country emerge from the COVID-19 pandemic and bounce back to recovery. With this, the major strategies aimed at accelerating infrastructure development have been updated as: (a) re-program activities and projects for the new normal; (b) implement strategic infrastructure for various infrastructure

subsectors; (c) ensure asset preservation; and (d) intensify infrastructure-related research and development (R&D) on technologies, including monitoring and evaluation of critical outcome indicators.

Recognizing that resources are limited as the country deals with the COVID-19 pandemic, the government was constrained in the rollout and implementation of the infrastructure program in 2020. Nonetheless, the rollout of infrastructure projects is expected to bounce back in 2021 and

be a major driver of economic growth through job generation, among others. The government will thus continue to closely monitor progress and make adjustments on an annual basis or as necessary.

Project proponents or implementing agencies will also have to be mindful of the project planning and implementation phases such that mobilization of resources are properly timed. Important projects that form part of master plans and are expected to yield significant benefits in the long-term will still be pursued by starting pre-procurement activities, capacity-building, social preparation, coordination among agencies and local government units (LGUs), anticipating and resolving right of way problems and other regulatory issues, which are common and recurring causes of implementation delays. Addressing such issues will pave the way for smoother and faster implementation of projects in the future. Thus, while the pandemic may have slowed down and disrupted the implementation of projects, with the right policies, financial instruments, and our whole-of-government approach, the resumption of the BBB Program is intended to put the Philippines in a good position to drive its recovery and resiliency program.

Sustaining operations and accelerating infrastructure development

Re-programming activities and projects for the new normal

Invest in necessary infrastructure under the new normal. Accelerating infrastructure development has gained increased urgency and relevance as a result of the COVID-19 pandemic. To rise from the economic downturn and build lasting gains, the government will need to stimulate optimism and confidence in the general economy and investing in the necessary infrastructure under the normal is a crucial strategy to support recovery by creating stimulus for economic growth through employment opportunities and aiming for renewed investor appetite and confidence.

The government has an ambitious infrastructure development program in place that has undergone review and reprioritization. As the country continues to address the COVID-19 pandemic, the government has prioritized development interventions that will have the most impact on the economy, guided by recovery and resiliency measures. This initiative involved assessing the available fiscal space for the infrastructure sector due to the pandemic, firming up budgetary requirements, and adjusting carefully the infrastructure spending strategy such that additional fiscal space for pressing health and social recovery programs may be better supported.

Thus, the government has carefully revisited the BBB Program and the Infrastructure Flagship Projects (IFPs) to take into account emerging priorities under the new normal and prioritize projects with high economic impact with due consideration for project readiness, implementation capacity of line agencies, job-generation potential, and interest and risk level of the private sector. Accelerating infrastructure investment is seen to drive economic and productive activities across industries towards creating employment opportunities to support direct and indirect jobs that, in turn, have multiplier effects that can help trigger and regain consumer spending and business confidence.

Besides infrastructure being crucial to support recovery, it is also a key strategy to strengthen the country's resilience given the changing global economic landscape and to be better positioned in dealing with future pandemics and their socioeconomic implications. Thus, the government recognizes that a shift in investment priorities under the new normal is necessary with greater focus on resiliency that can build a better foundation for lasting growth.

The shifts in focus in infrastructure investments involve development interventions in various infrastructure facilities and services that have gained imperative value and urgency in transitioning into the new normal and unleashing economic opportunities in a post-pandemic world. The changing patterns in the way people

work and do business provide an impetus for the government to fast-track its efforts in shifting into the digital economy and contactless society, which require enhancing the country's digital infrastructure and broadband internet. Additional investments will be pursued in affording new priorities for social infrastructure services under the new normal, particularly given the heightened importance of advancing our healthcare systems and the capacities of our healthcare facilities; to continue the delivery of quality education through blended learning and improvement of our education facilities; and to provide appropriate housing and resettlement in support of the *Balik Probinsya, Bagong Pag-asa* (BP2) Program. Access to safe and adequate water supply and sanitation will be given priority with ever increasing water demand and consumption, especially to help mitigate the spread of COVID-19 and other diseases through proper hygiene. The development and maintenance of irrigation facilities will also be necessary to support the food security goals of the country. Moreover, the electrification efforts will be accelerated, particularly in off-grid areas, to support the energy requirements under the digital economy and contribute to providing security and promoting lasting peace. With all these, continued investments in infrastructure come with exercising fiscal prudence and enhanced capacity to efficiently utilize the available resources.

Pursue PPPs in infrastructure development.

The private sector will play an important role in supplementing government efforts and augmenting public resources as the latter can mobilize the former's capital to fully or partially finance infrastructure projects and tap their efficiency and expertise in project delivery and management. Through PPPs, government resources may be freed up for urgently needed health and social recovery programs.

Along this line, the government will continue to enhance the regulatory framework for PPP to address various issues and challenges and fast-track the implementation of priority projects and programs. In this regard, the government intends to amend the NEDA JV Guidelines in the immediate term.

Continue to push for reforms and convergence programs. With less than three years remaining in the Plan period, convergence programs and inter-agency collaborations will be further intensified, such that the needed reforms that the government has initiated can be finally realized and implemented.

To smoothly carry out the BBB Program, the NEDA will work closely with the Department of Budget and Management (DBM) and other member agencies of the NEDA Board Committees to strengthen the alignment and synergy among planning, programming, and budgeting. Moreover, the government will continue to champion the timely movement and completion of priority programs, activities, and projects by identifying operational issues hampering project implementation under the new normal and aiming for the early resolution of bottlenecks. To minimize road disruptions in the rollout of infrastructure, the government (e.g., Department of Public Works and Highways [DWP], Department of Transportation [DOT], Department of Information and Communications Technology [DICT], among others) will form convergence programs and agreements for coordination of planning permission and civil works, and in the process, to also work towards transparency and better coordination with utility service providers.

Implementing strategic infrastructure

Public investment will be focused on transport, water resources, energy, information and communications technology (ICT), and social infrastructure, which are strategic and crucial in achieving development goals, especially in transitioning into the new normal.

Transport

The government will further enhance the efficiency of the transport sector to sustain economic growth and increase competitiveness by providing adequate, accessible, reliable, efficient, seamless, and safe movement of people and goods across the country, neighboring regions, and the world.

Enforce the NTP and strengthen it through legislation. Following the adoption of the policy by the NEDA Board, a law adopting it and creating independent regulatory bodies for the railways, airports, and seaports, among others, will establish a more streamlined transport sector that is able to efficiently and effectively carry out the identified development strategies.

Pending legislative action on the NTP, the NEDA Board Committee on Infrastructure (INFRACOM) and the Inter-Agency Technical Committee on Transport Planning will continuously ensure that the NTP and its IRR will be adhered to in planning, programming, implementing, operating, and maintaining transport projects and in operationalizing strategies and intended policy reforms.

In accordance with the principle of local autonomy, the LGUs will be made responsible for mobility outcomes in their jurisdictions. To this end, the DOTr and the DPWH will extend technical assistance to the LGUs in the field of transport planning, transport and land use integration, program and project implementation and monitoring, and traffic engineering and management. Consistent with the NTP, the closer engagement between national and regional transportation planning offices and LGUs will ensure that local mobility initiatives are guided by master plans and evidence-based studies from an overall network perspective, aligned with national and regional development plans, and based on financial and economic viability, comparative advantages, and linkages with other transport modes, which in turn will guide the rational development of an intermodal transport infrastructure network.

Relatedly, baseline transport data and information will have to be consolidated and a unified database and transport model will be maintained. At the local level, regional agencies of DOTr, DPWH, Land Transportation Office (LTO), and Land Transportation Franchising and Regulatory Board (LTFRB), together with the LGUs, will be responsible for collecting traffic flow data across different transport modes, which will be shared with the central transport database.

Adopt an integrated approach to transport planning, in line with the NTP and the National Spatial Strategy (NSS). The National transport agencies and the LGUs will implement an integrated approach to land use and transport planning in the provision of transport infrastructure and services. This approach aims to improve the capacity of transport facilities to adequately serve the demand for movement of passengers and goods to, from, and within the centers of socioeconomic activities identified in the NSS. The LGUs will be required to prepare local transport sector plans, such as the Local Public Transport Route Plan (LPTRP) as part of their Comprehensive Development Plans (CDP). The CDPs will be regularly updated to account for new and significant developments in land use and transport networks. Critical infrastructure in times of disasters, calamities, and future pandemics will be required in the Comprehensive Land Use Plans (CLUPs) of the LGUs.

Develop efficient and resilient national supply chain network system. Transport agencies will continue to formulate convergence programs with concerned agencies to ensure that economic sectors are provided with adequate transport infrastructure support and services. Agricultural areas will continue to be supported through the provision of farm-to-market and farm-to-mill roads, in accordance with the standards set for both design and construction. Transport infrastructure supporting tourist destinations will continuously be developed to boost tourism activities that were affected by the COVID-19 pandemic.

To support development in Mindanao, road projects under the Mindanao Logistics Infrastructure Network (MLIN) will be pursued along with the implementation of the Improving National Roads for Inclusive Growth in Mindanao Projects in Western Mindanao. The capacity of the Brunei Darussalam-Indonesia-Malaysia-Philippines East ASEAN Growth Area (BIMP-EAGA) road network will also be increased.

With an emphasis on improved connectivity and enhanced mobility, multimodal transport terminals complete with ancillary facilities will

be established to provide smooth transition for passengers and freight from one mode to another.

In terms of securing the backbone of transport planning activities in vulnerable areas, priority will be on the development and enhancement of critical transport infrastructure (i.e., transport facilities that are critical in ensuring continued economic activities during disaster operations and health crisis response) and mitigating pandemic impacts. These efforts will be complemented and supported by a resilient energy and communications infrastructure development. Critical transport infrastructure will be made climate- and pandemic- resilient to provide continuity in the movement of people and goods, contribute in containing the spread of contagion, and ensure last-mile operation for humanitarian logistics. Logistics estates and hubs will be developed at critical locations nationwide to support not only regional economic activities, but also humanitarian logistics in times of pandemics and disasters. Applicable standards and best practices on the adoption of resilient, efficient, and environment-friendly designs and technologies will be adopted.

Ensure the upkeep of existing infrastructure while expanding the transport network. To ensure that the transport sector is able to support economic development, the physical state of existing infrastructure will be maintained at a level that generates the optimal economic outcomes. This strategy will be coupled with the expansion of the transport network to reach the rest of the country and the world. Projects that are implemented, especially those identified as flagship projects, will be monitored closely to ensure the quality and timely delivery of output.

Ensure the universal accessibility of transport facilities. As part of the government's vision to improve the quality of life of the people through eased access, universal accessibility design and principles will be considered in the implementation of all transport infrastructure facilities and services to ensure an inclusive and people-oriented national transport system. The Task Force on Accessibility created in 2007

will be revived to develop initiatives that will address the unique needs of persons with disabilities, elderly, women, and children in terms of mobility within the transport network, particularly in public transport systems.

Land-based Transport

Prioritize mobility of people and goods over private vehicles by improving land-based transport network through engineering, enforcement, and education. The land-based transport network is slated for road widening and integration with mass-transit facilities through the implementation of multimodal transport terminals. For a more efficient use of road infrastructure, high-quality public transport modes will be pursued, such as public transport reform, fleet modernization, route rationalization, and environmentally-sustainable urban transport systems, among others, so that commuters will prefer public over private vehicles and more people can be moved with less road space, thereby addressing traffic congestion. In high passenger density corridors, high capacity mass transit systems such as rail will be prioritized over buses and jeepneys.

On the modernization of public transportation and in transitioning to the new normal, the DOTr and its attached agencies will adopt the Philippine Standard for Accessible Public Utility Vehicles formulated by the Department of Trade and Industry – Bureau of Philippine Standards (DTI-BPS).

Non-motorized transport (e.g., bicycle and pedestrian infrastructure) will be integrated into the existing network through retrofitting. The design of new projects will also consider features to encourage more walking and cycling trips. Standardized designs for bicycle and pedestrian infrastructure will be mainstreamed in projects of national transport agencies and LGUs. Existing and future transportation facilities will have infrastructure supporting non-motorized transport modes (e.g., bicycle racks, adequate pedestrian lighting) to promote multimodal mobility.

Appropriate traffic management measures will also be enforced and updated to be responsive to prevailing situations. Traffic engineering solutions, such as the use of intelligent transport systems (e.g., signalized intersections, advanced detection systems, incident detection), will be installed particularly in urban areas.

Anti-overloading measures, including penalties, will be strictly enforced and strengthened to prevent the rapid deterioration of roads. Additional weighbridges and portable weighing devices will be set up to broaden the scope of implementation. To ensure compliance with international standards on vehicle safety and environmental impact, the Motor Vehicle Type Approval System and Motor Vehicle Inspection System (MVIS) will be implemented.

Training of drivers and traffic enforcers will be continued to ensure that investments in transport facilities and other assets are preserved through proper use.

Sustain the expansion and enhancement of strategic corridors. Future developments will be pursued for the national road network with the planned implementation of the Philippine High Standard Highway Network Program Phase II, which will add about 1,044.6 kilometers (km) of high-standard national roads and expressways across metropolitan areas (884.7 km in Luzon, 73.8 km in Metro Cebu, and 86.1 km in Metro Davao). Toll expressways will be equipped with interoperable contactless toll collection systems for greater mobility and limiting person-to-person contact.

To complement the level of service being delivered by the national road network, local roads will continuously be improved by upgrading, expanding, and providing adequate maintenance. Road capacity should be optimized while maximizing the design speed in the road network. Innovative designs of intersections and interchanges will also be adopted and temporary bridges will be made permanent. Design standards that ensure the safety of users and resiliency of roads and bridges will be strictly enforced noting

the road network should remain functional for humanitarian logistics.

Decongest local and national transport corridors. On the matter of encroachment along transport corridors, the DILG, together with the Philippine National Police (PNP) and respective LGUs, will sustain directives for all concerned units to clear all roads of illegal structures and abandoned construction materials, and rehabilitate damaged road facilities. To complement the ongoing inventory of national roads by the DPWH and to establish a complete database and monitoring of the Philippine road network, LGUs will also be required to prepare an inventory of all roads within their jurisdiction as part of their geographic information system-based Local Roads Network Development Plan and their respective Local Public Transport Route Plans as part of their CLUPs.

Expand the rail network and other mass transit systems and ensure their accessibility, affordability, convenience, and reliability. The rail network will be expanded by developing new lines in high-density corridors, taking into consideration the plans for road-based transport infrastructure, especially in cases where projects will utilize the same right-of-way. Consistent with the objective of moving more people and cargos rather than vehicles, priority on the right-of-way will be accorded to rail-based transport over road-based transport.

Tourism, trade, and commerce will be supported through enhanced interconnectivity of passenger and freight railway transport development to generate opportunities for local area development, as well as expansion of local markets to promote productivity and trade competitiveness.

Noting the significance of railway in transit-oriented development strategies, the completion of planned interregional railway projects will be prioritized to facilitate greater interregional accessibility, linkages, and seamless multimodal transport network and to increase opportunities for economic activities. The establishment of rail-based connection to seaports, dry ports,

inland container depots, and airports will also be pursued for faster movement of freight and to decongest traffic along road networks to/from said terminals.

Transport network operators, both private and public, will continue to forge convergence undertakings to achieve integrated fare collection systems. Stored value cards or similar electronic media will be used to ensure maximum convenience for passengers and enable easy transfer between modes. While non-contact fare system is already being used in the Light Rail Transit (LRT)/the Metro Manila Rail Transit (MRT), migration from physical stored value cards to mobile, contactless payment will be expanded to other public transport modes to reduce the risk of spreading diseases, as part of health and safety protocol in the public transport sector.

Policies and guidelines on procurement activities in the railway sector will be customized to ensure the availability of highly-specialized spare parts and supplies.

To ensure that the quality of rail and mass transit systems are up to standards, capacities of skilled workers in mass transit systems, especially rail, will be upgraded. In view of the forecasted need for skilled workers manning the planned public mass transit projects, the Philippine Railway Training Center will continue to provide comprehensive technical training for train drivers and other rail professionals.

Air Transport

Improve the operational efficiency of airports and address constraints to optimal capacity utilization. All possible means to achieve operational efficiency and the optimal capacity utilization of airports will be explored. In particular, strategies will focus on decongesting air traffic serving the Greater Capital Region, such as building a new international airport, guided by an optimal airport strategy. In the interim, movements in both land and air facilities at the Ninoy Aquino International Airport (NAIA) will be optimized through procedural measures,

which involve airspace management and adoption of collaborative decision-making among the air traffic control, airlines, and ground handlers (e.g., by using ground movement radar and other technologies). Runway capacity will be optimized by cutting aircrafts' occupancy times. Development plans for the Clark International Airport (CRK) will be continued, including the establishment of a fast and direct access to Manila through a rail system providing non-stop and commuter services.

Implement an optimal airports system strategy to expand airport capacities at pace with growing demand. Existing provincial airports will be rehabilitated, while smaller or community airports will be upgraded to standard Principal Class 2 classification to cater to commercial flights for better connectivity with various tourist destinations. On the other hand, Aeronautical Lighting System and Instrument Landing System, can be installed in airports with appropriate facilities complying with the existing civil aviation regulations to enable night-time operations and improve accessibility, especially for those identified to readily accommodate said technology. The remaining regional airports will be assessed to determine night-landing viability. Appropriate design and operation measures will be identified to address limitations and achieve the goal of 100 percent coverage for all regional airports catering to commercial flights.

Facilities and equipment will be modernized (e.g., night-rating) in compliance with International Civil Aviation Organization (ICAO) and International Air Transport Association (IATA) standards, especially those that serve island provinces in Visayas and Mindanao. Security features/aspects should be integrated in the planning and design stages of development and/or rehabilitation of air transport facilities, to ensure allotment of sufficient space for security equipment (technology), processes (passenger and baggage throughput), and personnel (ergonomics). New investments will be made to service future destinations corresponding to the spatial and socioeconomic context and passenger demand.

Support the role of airports in spurring local tourism development and new growth centers.

To provide stimulus to local tourism development, especially in island provinces, tourism clusters identified by the Department of Tourism (DOT) will be served by a primary airport. Airport development in regional areas and island provinces will follow a hub-and-spoke model, where the gateway airport will connect to feeder airports providing access to areas of destination with natural and cultural tourism sites.

The role of airports as a catalyst for new growth centers and smart cities will be explored, taking off from the experience in CRK where demand growth complements and is reinforced by various ongoing mixed-use developments in Northern and Central Luzon (e.g., the New Clark City).

Strengthen and rationalize air transport regulations, policies, and protocols and modernize facilities to enhance air passenger experience.

The private sector will play an important role in the operations and maintenance and future upgrading of airport facilities. Leveraging on its financial capacity, operational efficiency, and technological advantage, the private sector will be tapped to complement the government's resources in the initial development and construction of airport infrastructure to deliver an enhanced passenger experience. In view of these, regulatory functions of air transport agencies will be strengthened.

To reduce the impact of interruptions in airport operations during natural and human-induced disasters, existing intervention protocols between airlines and airport authorities will be reviewed. Equipment inventory will be modernized and airport training modules will be further enhanced. To ensure that passengers receive appropriate compensation or accommodation in case of flight cancellations pursuant to the Air Passengers Bill of Rights, more public assistance officers will also be deployed.

Consider environmental impacts of airport operations.

The Civil Aviation Authority of the Philippines (CAAP) and other airport authorities (e.g., Manila International Airport Authority [MIAA], Mactan-Cebu International Airport Authority [MCIA], etc.) will ensure that airports will be ready for the implementation of the Second Phase of Carbon Offsetting and Reduction Scheme for International Aviation (CORSA).³ The Second Phase, which will be implemented from 2027 through 2035, will require the cooperation of airlines. As such, the groundwork on the necessary policy and infrastructure should be undertaken to ensure seamless implementation.

Maritime Transport

Improve port facilities to ensure that inter-island shipping, including a stronger roll-on/roll-off (RORO) network, will remain a viable option for transporting people and cargo.

Breakwater facilities will be constructed for wave protection in order to prevent ports from deteriorating. International standards will be followed in the expansion of port facilities. In addition, navigation channels to accommodate larger vessels will be installed to ensure the sustainability and efficiency of ports. These approaches will yield economic gains through lower transport cost, increased lifespan of products, and more profits and job opportunities, especially for fishing communities.

Sustain the optimal utilization of existing and additional port capacities.

The government commits to optimize the utilization of existing ports. Among the precursory measures for container ports are the development of a freight rail service between Clark and Subic, promotion of the use of inland container terminals, optimization of port container yard utilization, and integration of port management plans in the intermodal and multimodal approaches in the logistics network development. These efforts will be sustained with the implementation of additional plans, programs, and projects that

³ The CORSA, an initiative of ICAO, will be implemented in three phases: pilot phase (2021-2023); followed by a first phase (2024-2026); and a second phase (2027-2035). Participation in the pilot phase and first phase is voluntary (until 2026), after which, more stringent requirements from the scheme would be mandated to all member states. The Philippines has voluntarily applied to take part in the CORSA and has submitted an action plan to ICAO.

facilitate efficient flow of goods and services (e.g., dry ports, freight rail, and construction or expansion of regional ports).

The direct connection between Manila and Batangas Ports, through the Cavite Gateway Terminal, will be further enhanced, and co-loading (modified cabotage) will be promoted to encourage shipment between domestic ports. Existing dry ports will be improved and new ones will be built to provide support to manufacturers, importers, and exporters. Logistics hubs will be developed, where applicable, to connect industrial and manufacturing zones and agro-industrial areas to major port areas. Further, the capacity of the BIMP-EAGA Transit Transport Route in Mindanao will be improved to facilitate swift intra-EAGA transport.

Promote maritime transport as an alternative sustainable mode. Taking off from the initiatives on the revival of the Pasig Ferry System as a sustainable alternative to road-based transport, the government will develop the Coastal and Inland Waterways Transport System to further reduce urban traffic congestion and pollution, expand the intermodal transport network, increase regional connectivity, and create new business opportunities. The same system can also be utilized for disaster response, especially when road infrastructure in urban centers are damaged. Support for low-income LGUs and coastal and island communities in establishing their own seaports will be continued to promote local trade, tourism, livelihood, and disaster preparedness.

Implement the Maritime Industry Development Plan (MIDP). To accelerate the integrated and rational development of the country's maritime industry, eight priority programs, as well as other strategies espoused in the MIDP, have commenced implementation. These include the Nautical Highway Development Program, Maritime Tourism Program, and National Fishery Industry Development Program to improve the capacity, efficiency, safety, and security of shipping, as well as shipbuilding and ship repair services (SBSRs).

A global maritime hub for SBSRs and related ancillary businesses with a world-class research and training center in the country will be developed to bring together all maritime-related companies in one eco-maritime industrial park. This will provide comprehensive services to domestic and international passengers and crew, and cruise and cargo ships plying the Philippine waters for maintenance and other related services.

Safety and Security

Adopt a universally-accepted security structure to improve safety and security of the public transport system. An independent body will be created to investigate transport accidents and provide transport safety recommendations to minimize activities that may cause injury, death, loss, or damage to property. In the interim, the Office of Transportation Security (OTS) will continue to conduct compliance monitoring activities (CMAs), such as security audit, inspection, and test in public and private transport terminals to ensure that the security measures and procedures are implemented and in compliance with the standard presented in their respective security plans. Similarly, concerned agencies will ensure that projects are designed with appropriate safety standards. Advanced security systems for land-based terminals, airports, and seaports will be procured and installed. The Philippine Coast Guard (PCG) will continue its capability-building programs to ensure presence and control over the country's vast maritime domain. To ensure safety in marine navigation, the PCG will continue the installation of aids to navigation, such as buoyage systems, lighthouses, and other related facilities. New floating and air assets will be procured and a sufficient well-trained personnel complement will be provided. To serve the growing tourism and maritime industry, new bases or stations will be developed in strategic locations.

Strictly implement road safety measures. In modernizing traditional public utility vehicles and implementing new public mass transit systems, the following safety features will be incorporated: side entry/exits that can be easily

opened from either side, emergency exits, speed limiting technologies, dashboard camera, closed-circuit television, and global positioning system, among others. To reduce road crash incidents, street crossings for school zones and other public spaces along national roads should be replaced with pedestrian overpass/underpass, if applicable, and low-speed vehicles, such as tricycles and pedicabs, must be restricted in plying national highways. Other road safety laws and ordinances will be strictly implemented, including the use of dedicated bus lanes, motorcycle lanes, and loading/unloading areas; Land Transportation and Traffic Code (Republic Act [RA] 4136); Anti-Distracted Driving Act (RA 10913); Children's Safety on Motorcycles Act (RA 10666); and Road Speed Limiter Act (RA 10916).

Mainstream risk-based health protocols at the country's gateways. Considering that airports and ports are the country's gateways and frontline against the entry and transmission of pandemic diseases, there is a need to adopt operational measures that will minimize the risk of transmission at the terminals and onboard aircrafts and vessels or cruise ships. Health declaration forms of passengers will be administered and collected in electronic form and in advance prior to passenger departure. Procedures such as check-in, immigration, and boarding checks that can be conducted electronically will be automated and self-service options will be provided to minimize person-to-person contact. High-end temperature scanners and sanitation facilities in major international and domestic airports and ports will be set up and mandatory temperature screening will be imposed on inbound and outbound passengers. Passenger movement during boarding and disembarkation inside the cabin may be limited to smaller batches to maintain physical distancing. Additional cleaning and sanitization schedules by the crew before boarding and after disembarkation should be implemented.

Water Resources

Pursue water supply and sanitation (WSS) policies, plans, and programs in accordance with the key

reform agenda identified in the Philippine Water Supply and Sanitation Master Plan (PWSSMP). With the amplified importance of WSS during the COVID-19 pandemic and moving forward, the reform agenda will focus on the following areas, which are ultimately aimed at making water services adequately accessible for all: (a) establishing effective WSS sector institutions; (b) strengthening regulatory environment; (c) creating and ensuring effective WSS services; (d) balancing water supply and demand; (e) building climate resiliency; (f) enabling access to funding and financing; (g) managing data and information; and (h) driving R&D.

The creation of an apex body for water resources and the establishment of an independent economic regulatory body for WSS will remain as priority reforms in the sector. As envisioned, the apex body will be primarily responsible for the formulation and implementation of a comprehensive water development and management plan for the Philippines, in accordance with the principles of integrated water resources management (IWRM) and integrated coastal management. The independent water regulatory body, on the other hand, will harmonize regulatory practices, processes, and fees, among others, to facilitate and rationalize the expansion, improvement, and efficient provision of WSS services in the country. In the interim, the government will also continue to push for an executive issuance that will strengthen the National Water Resources Board (NWRB) to address fragmentation in the water sector and provide the overarching framework for an integrated and coordinated policy-making, planning, and implementation of programs and projects.

To ensure access to safe and adequate water to cope with the inevitable increase in water demand and consumption for the precautionary or mitigating measures for COVID-19 and other diseases, the government will fast-track the implementation and expansion of WSS infrastructure and services. As a complement, a water demand management program will likewise be implemented through: (a) conduct of intensive public education campaign on water demand management; (b) formulation

of policies and strategies for efficient water supply system; and (c) conduct of researches on water storage and collection systems.

Pursue initiatives on attaining water security.

Increase in water demand arising from an expected rise in individual hygiene practices and disinfection of public spaces due to COVID-19, as well as rising support to urban/community farming practices, would call for new water sources to ensure that demand is met, especially in areas suffering from water scarcity. Thus, the government will continue to support the development of new water sources and prioritization of surface water development, where feasible. Groundwater recharge system in the development of the surface water source for critical areas will be incorporated, wherever possible, in accordance with prescribed standards. Measures on efficient water utilization and conservation, as well as the use of eco-efficient water infrastructure such as, but not limited to, rainwater harvesting, water reuse, proper agricultural and agronomic planning for irrigation, and other emerging technologies on WSS will continue to be promoted to avert water shortage.

With the reactivation and reconstitution of the *El Niño* Task Force⁴ pursuant to Memorandum Order No. 38, s. 2019, the NEDA, as overall head, will revise and update the Roadmap for Addressing the Impacts of *El Niño*. The NEDA will also facilitate action on the pertinent recommendations emanating from the National Roadmap for Water Security currently being prepared by the NWRB. Said roadmap will incorporate the possible impacts of future epidemics, pandemics, and climate change or variability to address the impending water crisis.

Adopt a common/unified framework for resource allocation for WSS and review the National Sewerage and Septage Management Program (NSSMP) to accelerate the provision of WSS services. Under the common/unified framework for resource allocation, the NG will ensure the availability

of the required budget allocation for WSS projects across the country, which will include funding for project preparation, development activities, and capacity-building interventions on the operation and maintenance of facilities. Likewise, in accordance with the Clean Water Act (RA 9275), sewerage and septage management projects will be implemented. Given this, the government will explore the expansion or restructuring of the NSSMP, in line with principles of the common/unified framework for resource allocation for WSS to accommodate more beneficiaries other than sewerage or septage management systems in highly-urbanized cities and first-class cities or municipalities. Such expansion and restructuring of the NSSMP may include the review and restructuring of the cost-sharing scheme with the LGUs on the basis of absorptive capacities and performance, as well as technical assistance and revision of cost-sharing schemes in the preparation of feasibility studies.

Optimize funds for irrigation development and strengthen technical capacities for the development and maintenance of irrigation facilities guided by the National Irrigation Master Plan (NIMP).

Water allocation for irrigation will have to be managed efficiently to offset the imminent increase in domestic or municipal water consumption to combat COVID-19. With the passage of the Free Irrigation Service Act (RA 10969) in 2018, funds for the restoration and rehabilitation of irrigation infrastructure and facilities will be optimized in accordance with the recommendations of the NIMP, which is currently being finalized, to ensure food security amidst the pandemic. Specifically, the government will shift its focus in the short term towards funding the operation and maintenance, rehabilitation, and/or restoration of existing irrigation systems across the regions, instead of funding for the construction of multi-year large irrigation systems.

Other developments in the agricultural sector, such as Rice Competitiveness Enhancement

⁴ Created pursuant to Executive Order No. 16, s. 2001.

Fund (RCEF) and support for diversified, non-traditional, and high-value crop farming, will also be taken into consideration in setting the direction for the irrigation sector under the said master plan. Likewise, to ensure effective and sustainable operations and maintenance of irrigation facilities, there will be capacity-building activities to improve the technical skills and workforce of LGUs, National Irrigation Administration (NIA), Department of Agriculture (DA)-Regional Field Offices, Bureau of Soils and Water Management (BSWM), Irrigators' Associations, and Small Water Irrigation System Associations.

Improve coordination between flood management efforts and undertakings in other sectors. Pending the creation of an apex body for the water sector, the DPWH, as the de facto lead agency for flood control and management, and other relevant agencies will intensify coordination between flood management efforts and undertakings in other sectors, such as solid waste management, reforestation, and housing, among others, under the general framework of the IWRM and river basin and land-use planning. Likewise, a paradigm shift from looking at floodwaters as “disaster to be prevented” into a “resource to be managed” is a necessary step in attaining the objectives of the IWRM framework. In this regard, storage of excess floodwaters will be prioritized in the context of water conservation and efficiency measures; flood management infrastructure that will also serve as potential source for domestic water supply, irrigation, and/or hydropower generation, among other possible uses, will be implemented, where feasible. Meanwhile, in anticipation of the completion of flood control master plans and studies for the major river basins, timely financial support for the full implementation and maintenance of flood management and mitigation measures under said master plans will be provided through the inclusion of the priority projects in the investment program of the national government (NG). Under the proposed creation of

an apex body for the water sector, a comprehensive database of all water-related data including flood-related information, will be established and regularly updated.

Energy

Integrate and enhance the energy plans. The Philippine Energy Plan (PEP) will be enhanced by adding a spatial dimension that informs investors on where to invest their energy projects. The PEP will integrate the inventory of traditional and renewable upstream resources with the downstream and the Power Development Plan. Renewable energy (RE) zones will continue to be identified and developed to facilitate connection to the transmission and distribution facilities. Other fuel resources and existing logistical facilities will be supplied to encourage the investments that will improve the operations of the energy service and goods providers.

Implement policy reforms to promote competition and encourage investment in the energy sector. The Department of Energy (DOE) continues to pursue the policy reforms under the Electric Power Industry Reform Act (EPIRA) of 2001 (RA 9136) and the Renewable Energy Act of 2008 (RA 9513). Policy issuances will be implemented to enhance the consumers' power of choice (i.e., Amended Policy on the Retail Competition and Open Access and the Green Energy Option), the reduction of costs (i.e., abolition of the Universal Charges – Missionary Electrification for new contracts and the Uniform Billing Policy), and the enhancement of benefits of host communities of power generation facilities and energy resource developers.

As an enabling mechanism for host communities to respond to the ongoing COVID-19 pandemic, the DOE Department Circular (DC) 2020-04-0008⁵ issued on April 6, 2020, authorizing host LGUs to utilize the Energy Regulation (ER) 1-94 Funds for COVID-19 related response mechanisms.

⁵ DOE, DC 2020-04-0008-0, Rationalizing the Utilization of ER 1-94 Fund by Host LGUs in Response to COVID-19 Public Health Emergency, April 6, 2020.

The strengthened Competitive Selection Process (CSP) in securing power supply contracts of all distribution utilities' (DU) procurement of power supply agreements for their captive market will also be sustained. Implementation of the CSP has already resulted in the reduction of generation rates for the Manila Electric Company, which covers around 50 percent of the consumers.

The full commercialization of the Wholesale Electricity Spot Market (WESM) in Mindanao will be pursued to provide a competitive market for buying and selling of electricity that is not covered by bilateral contracts, and at the same time, promote efficiency in the scheduling and dispatch of generation capacities in the region. Meanwhile, new market features and enhancements to systems and procedures will be introduced to improve the existing WESM in Luzon and Visayas, including the transition into the five-minute WESM replacing the current one-hour trading interval. The WESM in Mindanao and the enhanced WESM in Luzon and Visayas are expected to operationalize once the ERC approves the price determination methodology (PDM) adopting the five-minute dispatch interval and certification of market readiness (for Mindanao).

Under the context of economic recovery and spurring growth, more choices and more affordable electricity are crucial for industrial, commercial, and residential customers. To encourage the entry of more power generation investors, the government enacted the Energy Virtual One-Stop Shop (EVOSS) Act (RA 11234), Executive Order (EO) No. 30, s. 2017, and the LGU Energy Code (DOE-DILG Joint Memorandum Circular 01-2020), which streamline the permitting processes for energy projects. Phase 1 of the enhanced EVOSS system is targeted to be carried out by end of third quarter of 2020 in an effort to promote faster and simplified permitting process of power projects. This will involve online submissions of all the needed applications, documentary requirements, and online payment for charges and fees. Moreover, the EVOSS will consider the

expansion of its coverage to all the other non-power energy projects, which will also be implemented in phases.

To meet the increasing energy demand, the DOE will continue to explore the development of all the available energy resources, including nuclear energy option. The National Smart Grid Policy Framework and Roadmap for distribution utilities (DOE DC 2020-02-0003) will likewise be implemented. Smart grid uses innovative technologies to modernize electric infrastructure towards empowering consumers, ensuring energy supply flexibility and security, improving electric grid performance and asset utilization, and protecting the environment (e.g., through the use of smart meters).

Further, the privatization of power plant assets, which include the capacity of government-owned generating plants and contracted capacity of independent power producer (IPP) contracts, will be accelerated. To ensure the success of asset privatization, the Power Sector Assets and Liabilities Management (PSALM) Corporation will engage third-party advisors to conduct an extensive study that will serve as basis for formulating options and structures for the privatization of IPP-contracted capacity and real estate assets. Options include the sale through public bidding of the power plant, together with the underlying land owned by the PSALM or the government. The PSALM will also streamline and simplify bidding procedures to attract more bidders. Further, it will observe protocols and make use of applicable virtual and blended platforms in the privatization or disposal process to ensure that public bidding schedules will push through under the new normal.

As structural reliability is important in the new normal, major hydroelectric power plants under government ownership will be rehabilitated and updated. Electricity generated from undisposed power assets throughout the country will continue to be provided to distribution utilities and other power customers at regulated rates.

Expedite the implementation of remaining policy mechanisms under the Renewable Energy Act of 2008 (RA 9513) to further encourage RE development in the country. Policy issuances on the Renewable Portfolio Standards and the Green Energy Option will be implemented to require mandated electric power industry participants to source a certain percentage of their power mix from eligible RE sources such as biomass, geothermal, solar hydropower, ocean, and wind. Establishment of the RE market will facilitate the trading of RE Certificates. To strengthen R&D in the RE sector, affiliated RE Centers will continue to be established.

The water-energy-food nexus will be incorporated in the design and facilitation of all the energy projects to conserve water, ensure energy security, and maximize food production. Instead of competing with the water and food sectors, complementation will be targeted through the introduction of RE and energy storage technologies in farming and crop processing methods and machineries, such as, but not limited to, pump or drip irrigation, rice hulling, and milling.

Moreover, the use of RE systems in the health and education sectors is being considered, such as the use of off-grid powered health and educational facilities using RE and energy storage systems.

In implementing the net metering policy,⁶ the government will review the current pricing methodology and financing mechanisms that will help in the adoption of PhotoVoltaic (PV) in the country. The DOE will continue to conduct policy studies to accelerate the positioning of RE in the country.

In line with the thrust of promoting more robust regional and local development, creating livelihood opportunities, and promoting inclusive growth, the Electric Cooperative-owned Distributed Generation Facility Program will be implemented. This program will develop distribution generation facilities using various

RE sources to be owned by the 121 electric cooperatives. In support of the BP2 Program, it will provide additional power sources that can stimulate investors to relocate investments and cater to the requirements of the people in the provinces.

Continue to develop transmission and distribution facilities, and projects that will transmit electricity efficiently to various load centers and interconnect the entire grid and other areas. The country's power transmission network will be unified to allow flexibility in the power grid system. Under the One Grid Philippines, the three major grids will be able to share excess supply. This program optimizes the use of available energy resources and additional generation capacities. To further improve the delivery of power services, the government will harmonize the Power Development Plan by integrating the Transmission Development Plan, Distribution Development Plan, and the Missionary Electrification Development Plan with the corresponding RE targets under the National Renewable Energy Program. It will also support the development of the Philippine Smart Grid. The National Transmission Corporation, its concessionaire, the National Grid Corporation of the Philippines (NGCP), and the DUs will coordinate with concerned agencies (e.g., DPWH) to explore the possibility of including the future installation of power transmission or distribution lines to connect island grids and other areas in the design of proposed inter-island bridges.

Ensure timely implementation of electrification programs, especially for remaining unelectrified off-grid islands, geographically-isolated and depressed areas, and last-mile communities. The DOE is closely monitoring the implementation of the three major forms of electrification programs — household electrification, grid electrification, and off-grid electrification — with the aim of fast-tracking the programs to achieve total household electrification by 2022. These are especially critical in supporting regional development

⁶ Net-metering is a consumer-based renewable energy incentive scheme that allows consumers to produce their own power generation using eligible renewable energy facilities and to deliver excess electricity supply back to the electric grid to offset their electricity consumption at 100 kW maximum.

under the new normal, where the need for physical movement to the biggest economic areas in the country would be tempered by the practicality of online connectivity and productivity.

As part of the electrification strategies under the Household and Grid Electrification Programs, house-wiring subsidy will be provided for unenergized households in areas with distribution facilities through the DOE's Nationwide Intensification of Household Electrification. Distribution line facilities will also be extended to unserved areas through the National Electrification Administration's (NEA) Expanded *Sitio* Electrification Program, Barangay Line Enhancement Program, and Expanded Household Electrification Program.

Under the Off-grid Electrification Program, individual PV Solar Home Systems will be installed by DUs via the DOE's Access to Sustainable Energy Program's PV Mainstreaming Program. In addition, the entry of the private sector in the Mini/Micro-Grid System will be allowed and encouraged through Qualified Third Party (QTP) schemes, JVs, and the National Power Corporation Small Power Utilities Group (NAPOCOR-SPUG) Mini-Grid Scheme. Further, RE-diesel hybrid power systems will also be developed to provide reliable electricity services at more affordable rates in off-grid areas.

To facilitate private sector participation in the achievement of the total electrification target of the government, existing guidelines on the participation of QTPs will be further streamlined and enhanced.

Promote the utilization of alternative fuels and new advanced energy technologies to diversify the country's energy resources and mitigate the adverse impact of energy use on the environment. The Alternative Fuel Roadmap will be implemented to promote a technology-responsive energy sector. For one, electric vehicles, where viable, will be supported to reduce dependence on conventional fuels. This involves the development of policy guidelines and regulatory framework for Electric Vehicle

Charging Stations, as well as the development of Minimum Energy Performance for Electric Vehicle Charging Stations.

Implement the Energy Efficiency and Conservation (EE&C) Act (RA 11285) and the Energy Efficiency and Conservation Roadmap. In April 2019, the EE&C Law was enacted to institutionalize energy efficiency and conservation as a national way of life for energy consumers. The law promotes the efficient and judicious utilization of energy and advocates the use of RE technologies.

In line with this initiative, the government will take the lead through the Government Energy Management Program (GEMP) involving efficiency and conservation measures in the government's use of electricity and fuel.

To help the LGUs reduce their energy consumption, the law also requires the development of local energy efficiency and conservation plans for incorporation in the local development plans. With the law in place, additional power supply for the country will come not just from new power plants, but also from energy savings as a result of EE&C measures.

Encourage investments in the upstream energy sector. To renew investor confidence in the Philippine upstream energy sector, the DOE will continue to promote the Philippine Conventional Energy Contracting Program, which offers 14 pre-determined areas for upstream development, with an option for investors to nominate their own prospective exploration area.

Pursue the development of the natural gas industry. The development of the natural gas industry will provide an additional alternative for consumers. The Philippine Downstream Natural Gas Regulation sets the policy direction and guidance for interested investors on the construction of natural gas facilities such as import receiving and regasification terminals, network of transmission, and distribution pipelines, under a regime of fair competition.

Pursue the establishment of a strategic petroleum reserve. A strategic petroleum reserve will shield consumers from volatile international oil prices and secure the country’s petroleum requirement. In the short to medium term, the project envisions to cover the immediate importation of oil products and the construction of additional oil storage facilities and small-scale refinery. This will serve the dual purpose of generating profit for the government and augmenting the production and supply of refined petroleum products in response to the rising conflicts in oil-producing countries.

Adoption of the Energy Resiliency Policy. The government will institutionalize the development, promotion, and implementation of a Comprehensive Resiliency Plan (CRP), as well as incorporation of mitigation improvements into the reconstruction and rehabilitation of damaged infrastructures in accordance with the Build Back Better principles. This measure will be facilitated through the DOE DC 2018-01-0001 on the “Adoption of Energy Resiliency in the Planning and Programming of the Energy Sector to Mitigate Potential Impacts of Disasters”, that was signed in 2018 to ensure an energy system that is resilient from risks and vulnerabilities from both natural and human-induced hazards.

ICT Infrastructure

With the aim of transitioning into the digital economy, the digital connectivity agenda, mainly driven by the government, will be of utmost importance under the new normal. Digital infrastructure will need to be provided to address the digital divide that has been heightened due to the pandemic. Policy reforms will also be introduced to facilitate digital transformation.

Fast-track the government’s digital connectivity program. Investments in digital infrastructure will need to be reviewed to support current demand for broadband internet access to enable telecommuting (work-from-home set-up), distance learning, telehealth, business for micro, small, and medium enterprises, online financial services, and as support to the BP2 Program.

The digital connectivity program, which encompasses the National Broadband Program and the Free WiFi in Public Places Program, will be prioritized and fast-tracked to accelerate the deployment of the needed digital infrastructure that can serve the government, businesses and industries, and the public, especially those in the countryside. The program embodies the government’s efforts in enhancing internet accessibility to bridge the growing digital divide. The physical infrastructure that will interconnect government offices via the Government Network (GovNet) can facilitate communication, address data gaps in various infrastructure subsectors, and allow better sharing and collaboration of different units of the government for coherence of initiatives. This aims to enable more LGUs to offer ICT-enabled government services to the public. Alongside this are cyber resiliency and security measures for the protection of government data and infrastructure.

Towards building our digital society and digital workforce, the broadband connection will also be provided to public segments of the country including public hospitals, rural health units, public schools, state universities and colleges, and other public places. This will support digital education, distance learning, and telemedicine towards developing an ICT-based knowledge base and extending social services to far-flung or last-mile areas. Under the new normal, the government will prioritize the provision of free WiFi in other public places, including community quarantine sites, plazas, transport terminals, airports, and seaports, among others.

Pursue ICT policy reforms to support the digital connectivity agenda. To complement the program initiatives, the government will need to pursue the necessary policy reforms and interventions in the ICT sector.

- The open access policy removes barriers to the entry of multiple, competing, and independent players in various layers of the broadband network. It aims to provide access to the facilities of existing national backbone network operators under terms that are non-discriminatory and transparent.

- Streamlining and harmonizing broadband-related permits, fees, and processes will hasten the rollout of broadband infrastructure. Permitting processes, fees, and requirements across national government agencies (NGAs) and LGUs need to be reduced, simplified, and harmonized to encourage players to enter the market. The LGUs may also establish online one-stop-shops for these purposes.
- Infrastructure sharing encourages the shared use of passive ICT infrastructure to reduce the associated costs in the broadband rollout. This will also expand wireless network coverage and enhance the quality of ICT services across the country, including in underserved and unserved areas.

Social Infrastructure

Social infrastructure is fundamental in the provision of adequate basic social services to achieve the human capital development objectives of the country. The implementation of social infrastructure projects will have to be ramped up to make up for the slow progress in the first three years of the Plan implementation.

Importantly, in line with the whole-of-government approach, the LGUs must also be able to step up in the provision of devolved social services, including education, health, and sanitation.

Education

The Department of Education (DepEd), in coordination with the DPWH, will endeavor to complete, by 2022, all programmed school projects under the Basic Educational Facilities Fund which have been abandoned or unfinished since 2014. Furthermore, to enhance its School Building Program, the DepEd has included the following strategies in its Public School of the Future for implementation in School Year (SY) 2020-2021:

Prioritize alternative learning platforms for formal education. Amidst the COVID-19 pandemic, education systems have largely shifted

away from traditional “face-to-face” forms of educational instruction. In this regard, the DepEd has adopted the blended learning system starting SY 2021-2022, which includes online distance learning, television and radio-based instruction, and distribution of printed learning modules to students, to ensure that quality learning opportunities are made available to public school students. Toward this end, universal access to reliable and affordable internet connection for the education sector will be prioritized. In addition, the DepEd may consider providing its faculty and students access to necessary ICT equipment (both hardware and software) to enable them to access virtual classes and other online learning modules. Given the foregoing, cooperation among concerned NGAs and LGUs should be ensured for the successful implementation of the blended learning program.

Efforts to address backlogs in the provision of education facilities will resume. As the country recovers from the pandemic and attendance to physical classes are then deemed safe for resumption, the DepEd, in coordination with the DPWH, will continue to address its current backlog in education infrastructure, especially in geographically isolated and conflict-affected areas. With the required physical distancing measures under the new normal, the DepEd may need to revisit its existing design standards and minimum specifications for education facilities (e.g., classroom size and class size). Nevertheless, the following facilities will need to be continuously provided or made accessible to public schools:

- Clean and potable water supply, comfort rooms, wash, and other sanitation facilities;
- Electrification that considers utilization of renewable energy sources—off-grid schools may be equipped with alternative sources of renewable energy through installation of solar panels, among others;
- Clinics that will also serve as multi-service hubs catering to the various health, nutrition, and medical needs of learners; and

- Efficient disaster response through a streamlined warehouse scheme for storage and inventory of supplies and for easier deployment and delivery of materials and equipment, such as temporary learning spaces or classroom tents, to replace those damaged by calamities.

Further, the DepEd will facilitate convergence initiatives with the DPWH, the Department of Health (DOH), the Department of Social Welfare and Development (DSWD), and other agencies in all governance levels, including the LGUs, to address the broader needs of the education sector.

Health

Sustain strategic implementation of health facilities. With the strain on the capacities of health facilities brought about by medical crises such as the COVID-19 pandemic as well as the expected increase in demand for health services post-pandemic, it is imperative for the NG to continue to invest in health service improvement. Construction of health infrastructure facilities that are energy-efficient, disaster-resilient (e.g., hospitals and healthcare facilities, including testing facilities, quarantine, and isolation facilities) and responsive to health and medical needs that have recently emerged with the pandemic will have to be prioritized, in accordance with the existing standards to prepare and ensure the sufficiency of the country's health infrastructures, not only during the path to recovery from COVID-19 but more so in case of any similar occurrence in the future. The DOH will conduct a comprehensive needs assessment of critical health facilities involved in service delivery networks, especially with respect to those that are vital in dealing with COVID-19. The assessment will form part of the basis for determining which facilities will be constructed (especially in underserved areas), upgraded, or expanded under the Health Facilities Enhancement Program (HFEP).

Improve epidemiological and surveillance capacities for COVID-19 and other infectious diseases. In response to the pandemic and in preparation for the possible emergence of other

highly infectious diseases, there is a need to establish an integrated health data management system that tracks and links patient referrals and laboratory testing and monitors the supply of available equipment, medicines, and blood, among others. Further, there may be a need to construct and establish an operational Level 2 Biosafety laboratory with adequate number of test kits in every region.

Solid Waste Management

Enhance technical and financial capacities of LGUs in implementing solid waste management (SWM) initiatives in compliance with the Ecological SWM Act of 2020 (RA 9003). The Department of Environment and Natural Resources - Environmental Management Bureau (DENR-EMB), together with the National Solid Waste Management Commission (NWSM), the DILG, and relevant stakeholders, will work towards enabling the LGUs to implement the following SWM strategies:

- Facilitate clustering or pooling of resources of LGUs for common SWM facilities and services for enhanced economies of scale;
- Explore innovative financing and improve access of LGUs to financing windows, such as those being provided by the government financing institutions and through PPP arrangements, to finance SWM programs;
- Adopt alternative technologies, including waste-to-energy, considering institutional, legal, and technical limits;
- Support knowledge management through increased investments in SWM-related innovation and R&D of appropriate technologies;
- Operationalize the National SWM Fund and study the re-institutionalization of the NG-LGU cost-sharing scheme for SWM; and
- Revisit the SWM Act of 2020 and make necessary amendments towards facilitating and expediting the provision of SWM facilities.

Protecting clean and healthy environment

Ensuring asset preservation

With emphasis on sustainability, safety, and resilience of infrastructure, asset management planning, and innovative maintenance strategies will be implemented to improve the infrastructure system's performance. The conduct of comprehensive vulnerability and risk assessment of critical infrastructure, particularly in areas considered as COVID-19 hotspots—including buildings that may serve as isolation or treatment facilities—is deemed urgent and significant.

Strengthen technical and financial capabilities for operations and maintenance. Training facilities will be established for the upgrading of the technical and managerial skills of the country's workforce and building their capacity to innovate. National and local level planning will be rationalized and processes will be streamlined to expedite program and project implementation. To optimize the use of funds for infrastructure development, value engineering, and value analysis techniques at different stages of project development will continue to be applied.

The country's regions will be developed through better rationalization of the budget allocation that takes into account the geographic location of infrastructure projects and programs. This effort will be guided by masterplans and roadmaps being formulated, maintained, and updated by pertinent agencies.

Incorporate climate change adaptation and disaster resilience measures and ensure the security of infrastructure facilities. Given the country's high vulnerability to disasters and the effects of climate change, disaster risk reduction and climate change adaptation strategies will be employed. The Energy Resiliency Policy, issued to institutionalize disaster resiliency efforts, aims to strengthen energy systems and facilities such that these can quickly restore power and provide alternative sources of energy in times

of emergency. To mitigate risks that threaten essential infrastructure services, there will be coordinated efforts to enhance the security of infrastructure facilities through the adoption of appropriate technologies (e.g., surveillance systems, satellite-based navigation systems, among others). Existing data infrastructure in the National Disaster Risk Reduction Management Operations Center will be upgraded. Joint exercises in disaster response protocols and engagement of stakeholders in disaster risk reduction and climate change adaptation will be conducted with the end view of meeting international sustainability standard rating systems for construction. Sustainability incentive programs will be promoted and the comprehensive and integrated strategic environmental assessment will be undertaken.

Intensifying infrastructure-related R&D

Recognizing that R&D can foster a more sustainable and efficient way of building infrastructure, the government will pursue R&D on renewable energy and technologies to meet the growing need for clean and affordable energy, cost-efficient technologies for the management of wastewater and solid, hazardous, and healthcare wastes to protect public health and the environment, new transportation technologies, climate change- and disaster- resilient infrastructure designs; and new methodologies for gathering and managing science-based data. In this regard, the establishment of R&D facilities will be supported.

Improve the collection, management, and utilization of infrastructure data across all subsectors for planning, programming, and policy-making. Updated, integrated, and comprehensive data for various subsectors of the infrastructure sectors will be made available to decision-makers to serve as basis in planning, programming, and policy-making. Towards this end, resources will be mobilized to identify vital data and statistics for the infrastructure sector, with the intent of establishing comprehensive databases based on available technological applications and platforms.

Legislative Agenda

The table below contains the various legislative agenda for the infrastructure sector.

Table 19.2. Legislative Agenda to Accelerate Infrastructure Development

LEGISLATIVE AGENDA	RATIONALE
Transport	
Enactment of the National Transport Policy (NTP)	<p>This aims to help achieve a safe, secure, efficient, competitive, dependable, integrated, environmentally sustainable, and people-oriented Philippine transportation system by setting forth policies that will serve as boundary conditions to guide all entities involved in the transportation sector in the exercise of their functions.</p> <p>This policy will provide the parameters for planning at the agency level, e.g., the formulation of the Philippine Transport System Master Plan.</p> <p>The NTP was adopted by the NEDA Board on September 12, 2017 and its IRR was approved by the INFRACOM on December 14, 2018.</p> <p>The proposed law is for filing/endorsement to the 18th Congress.</p>
Enactment of a law creating independent regulatory bodies for the railway and maritime transport sectors	<p>This will address the weak and fragmented institutional setup of concerned transport agencies by creating respective independent regulatory bodies for the railway sector and maritime transport sector that is consistent with the NTP. The existing dual roles of some agencies acting as both operator and regulator of transport facilities will be effectively eliminated.</p> <p>The bill is for the adoption of the NEDA Board and subsequent filing/endorsement to the 18th Congress.</p>
Enactment of a law creating an independent body for transport safety and security	<p>This seeks to place all transport safety and security matters under a single independent body that will, among others, investigate transport accidents and provide transport safety recommendations, thereby eliminating conflicting and overlapping functions of existing agencies or entities.</p> <p>Various Senate Bills (SB) and House Bills (HB) pertaining to the creation and establishment of a National Transportation Safety Board were filed in the 18th Congress.</p>
Enactment of a law institutionalizing the use of bicycles and other active and sustainable modes of transportation	<p>This aims to shift the role of bicycles and other forms of non-motorized and active transportation, from being an “alternative mode” towards an institutionalized mode of transport that is integrated in the transportation network of the country. This will be done by providing the necessary infrastructure and support services, establishing safety and design standards, and increasing public awareness on road safety and road sharing among motorists, cyclists, and pedestrians.</p> <p>Various SBs and HBs on the proposed measure were filed in the 18th Congress (SBs 66, 285, 319, 332, 948, and 1518, and HBs 1251, 1893, 2520, 4493, 5374, and 5435).</p>

LEGISLATIVE AGENDA	RATIONALE
Water Resources	
<p>Enactment of a law creating an apex body for the water resources subsector; and independent economic or financial regulator for WSS</p>	<p>The apex body will act as the lead agency to oversee/coordinate overall policy and project/program implementation to address the weak and fragmented institutional set-up of the water resources subsector.</p> <p>Meanwhile an independent economic regulator for the water supply and sanitation is envisioned to harmonize the regulatory practices, processes, fees, and standards on water supply and sanitation while addressing the overlapping functions or jurisdictions of existing regulatory entities.</p> <p>A substitute HB creating the Department of Water Resources (DWR) and the Water Regulatory Commission (WRC) was jointly approved by the HOR Committee on Government Reorganization and Committee on Public Works and Highways on November 12, 2019. Said HB was likewise approved by the House Committee on Appropriations on November 18, 2020.</p>
Energy	
<p>Amendments to the Electric Power Industry Reform Act (RA 9136)</p>	<p>The proposed amendments to the EPIRA aim to improve the implementation of the law's provisions and enhance its effectiveness to address high cost of electricity, alleged market collusion, and insufficient power supply.</p> <p>The following relative draft bills were filed in 18th Congress: HBs 466, 469, 2339, 2784, 3802, 7059 and 7341.</p>
<p>Enactment of an enabling law for the natural gas industry</p>	<p>This will provide an enabling legal and regulatory framework for the natural gas industry to guide investments in the sector.</p> <p>The bill has been filed in the 18th Congress as HB 3031.</p>
ICT	
<p>Enactment of the Open Access in Data Transmission</p>	<p>This measure aims to lower the barriers to entry and allow participation of more diverse set of providers to compete in the various segments of the data transmission industry.</p> <p>Open access is envisioned to pave the way for promoting physical infrastructure sharing among service providers and access network segments based on fair, reasonable, and nondiscriminatory terms.</p> <p>The bills have already been filed in the 18th Congress as HBs 57, 4109, and 5341 and are currently pending with the Committee on ICT.</p>
Social Infrastructure	
<p>Amendments to the Ecological Solid Waste Management (SWM) Act (RA 9003)</p>	<p>The proposed amendments aim to address the weak administrative, organizational, and institutional dynamics of LGUs in implementing SWM programs or projects.</p> <p>The proposed amendments, filed in the 18th Congress as HB 1598 and currently pending with the Committee on Ecology, include, among others, the mandatory creation of a local environment and natural resources offices and identification of dedicated focal SWM units with corresponding organization structure, powers, and functions.</p>

Ensuring Ecological Integrity, Clean and Healthy Environment

The COVID-19 pandemic and the mobility restrictions that were imposed have redirected our attention to the most basic needs of air, water, and food and how these relate to human health. In fact, encroachment into natural habitats caused the transmission of zoonotic diseases, such as COVID-19 from animals to humans, posing greater societal risk. The shift towards sustainable development then becomes an urgent matter of survival.

Building on the reforms and accomplishments in the past three years of Plan implementation, the government will continue to improve the state of the environment and natural resources (ENR) and increase resilience of resource-dependent and vulnerable communities against the converging risks arising from natural and biological hazards under a changing climate. The sector's goals and targets will be realized by addressing long-standing issues on governance and monitoring and evaluation (M&E).

Assessment and Challenges

Assessment: For the first three years of Plan implementation, stakeholders have increasingly been participating in transformative actions toward bringing back the benefits that Filipinos enjoy from environment and natural resources while improving resilience to climate and disaster risks. The following actions and reforms in the sector were put in place: (a) demonstration effect of rehabilitation efforts (e.g., Boracay and Manila Bay rehabilitation); (b) institutionalization of sector reforms through policy issuances and implementation (e.g., National Integrated Protected Areas System [NIPAS] Act, as amended by Republic Act [RA] 11038), Guidelines on Protected Area Suitability Assessment (PASA); (c) formulation of the Philippine Action Plan for Sustainable Consumption and Production (PAP4SCP); and (d) development of local climate change adaptation and mitigation/disaster risk reduction and management (CCAM/DRRM) plans and establishment of early warning systems.

However, current experience on the COVID-19 pandemic and the consequent imposition of community quarantine resulted in both negative and positive impacts on the ENR sector, which clearly manifested the interrelationship of environment and public health. On one hand, the restrictions on the movement of people during the quarantine and pandemic response measures and protocols have (a) caused limited patrolling, policing, and ground validation activities for wildlife and habitat protection, (b) generated more waste from healthcare facilities and households, (c) increased pressure on resource extraction as raw materials for additional quarantine facilities, and (d) increased vulnerability of resource-dependent communities to the economic and social impacts of the pandemic and natural hazards, especially with the onset of rainy season, which may be exacerbated by climate variability. On the other hand, the quarantine resulted in improvement in urban air quality and allowed many ecotourism

sites to start to recover their pristine state, thus encouraging behavior towards preservation and ecological restoration.

Challenges: In view of the new normal state arising from the COVID-19 pandemic, managing pollution and sustainable use of natural resources vis-a-vis addressing the threat of future pandemics amid climate change become even more challenging. In particular, poor waste management and pollution control exacerbate decline in environmental quality. Inadequate waste management facilities can increase the volume of untreated healthcare wastes which pose a greater threat to public health. Also, with the digitalization of most economic activities, harmful substances from unmanaged electronic wastes will contaminate land, air, and water – aggravating pollution and health risks. A lack of air and water pollution control measures can worsen the situation and even negate the environmental gains generated during the quarantine period. Further, ineffectual ENR governance and institutional arrangements undermine the effectiveness of protection, conservation, rehabilitation, and resilience measures. The national and sub-national governments have had limited capacity to manage multi-dimensional risks arising from natural and biological hazards, including climate change. This affects our response to mitigate the impacts and implement recovery measures. The low adoption of innovative technologies for enforcement and monitoring of wildlife and habitats also limits efforts to keep biodiversity intact and minimize zoonotic disease risks. Compounding these are the following long-standing challenges in the sector that need to be addressed:

- ***Issues on zoning, boundary delineation, and overlapping claims constrain efforts on the rehabilitation of natural resources.*** The absence of zoning, unresolved boundary conflicts in many LGUs, and outdated land

records and problems in land data capture pose challenges in: (a) achieving targets on issuance of residential free patents; (b) facilitating forestry-related investments; and (c) supporting preferential access of municipal fishers to coastal and marine waters, among others. These zoning and delineation issues stem primarily from the lack of national land and sea use, and permanent forest limit policies.

- ***Weak and fragmented M&E system in the sector prevents timely and appropriate interventions.*** This stems from the lack of an integrated M&E framework and inadequate capacity for the use of appropriate methodology, particularly for the collection and robust analysis of up-to-date ENR data. In fact, concerns on insufficient data capture from environmental monitoring stations and limited habitat inventory make it difficult to evaluate the effectiveness of ENR management interventions. Moreover, the methodologies being used to generate, monitor, and report data/information, are still inadequate, such as on (a) waste management (e.g., solid waste diversion rate, wastewater production vs. treatment capacity), (b) livelihood and other economic opportunities provided by ecosystems (e.g. ecotourism and biodiversity-friendly enterprises), and (c) resilience to the impacts of climate change and disasters (e.g., risk resilience index). Furthermore, existing review tools do not yet capture whether or not local plans (i.e., Comprehensive Development Plans [CDPs], Comprehensive Land Use Plans [CLUPs], Local Climate Change Action Plans [LCCAPs], and Local Disaster Risk Reduction and Management Plans [LDDRMPs]) are risk-informed and/or responsive to the vulnerability of a given locality.

Assessment and Challenges

Table 20.1 presents the medium-term targets corresponding to each of the major outcomes, namely: (a) biodiversity and ecosystem services sustained; (b) environmental quality improved; and (c) resilience of resource-dependent and vulnerable communities increased.

Table 20.1 Updated Plan Targets to Ensure Ecological Integrity, Clean and Healthy Environment

INDICATOR	BASELINE VALUE (YEAR)	TARGETS			
		2020	2021	2022	END OF PLAN
Chapter Outcome: Ecological integrity and socioeconomic resilience of resource-dependent communities improved					
Subsector Outcome: Biodiversity and ecosystem services sustained					
Forest cover increased (in million, hectares [ha])	7.01 (2015)	Increasing			
Quality of coastal and marine habitats under NIPAS marine protected areas (MPAs) and other priority coastal and marine conservation areas improved					
Percentage of hard coral cover (HCC) in MPAs (in number of MPAs):					
No baseline data	2 (2018)	0	0	0	0
Poor (0-22%)	12 (2018)	14	9	6	6
Fair (>22%- 33%)	11 (2018)	11	10	12	12
Good (>33%-44%)	4 (2018)	4	10	10	10
Excellent (>44%)	7 (2018)	7	7	8	8
Percentage of seagrass cover in MPAs (in number of MPAs)					
No baseline data	11 (2018)	0	0	0	0
Poor (0-25%)	11 (2018)	22	17	15	15
Fair (26-50%)	10 (2018)	10	12	11	11
Good (51-75%)	3 (2018)	3	5	7	7
Excellent (76-100%)	1 (2018)	1	2	3	3
Number of free patents issued	57,822 (2016)	62,000	67,000	72,000	360,000

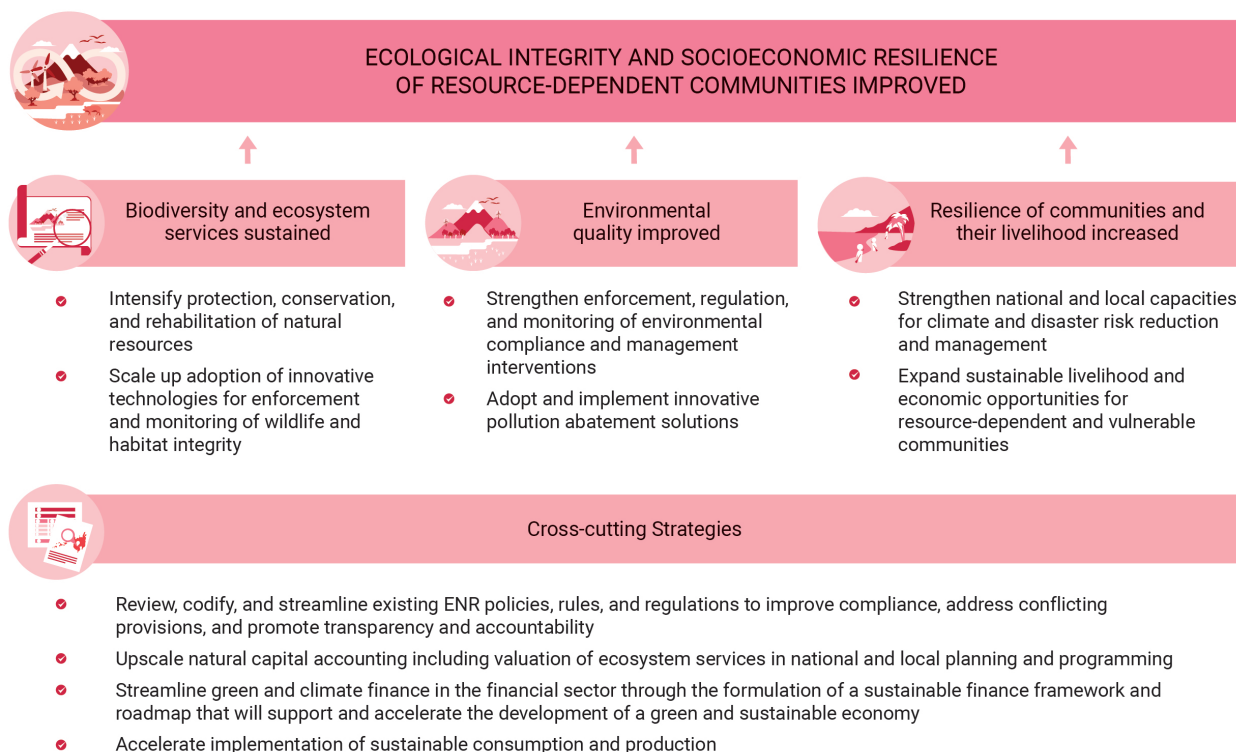
INDICATOR	BASELINE VALUE (YEAR)	TARGETS			
		2020	2021	2022	END OF PLAN
Subsector Outcome: Environmental quality improved					
Percentage of priority water bodies within water quality guidelines increased (e.g., Biochemical oxygen demand [BOD], dissolved oxygen [DO], potential of hydrogen [pH], phosphorous [P], temperature, total suspended solids [TSS], fecal coliform)					
Public water supply (%)	0 (2016)			Increasing	
Food production (%)	20 (2016)			Increasing	
Recreational (%)	87 (2016)			Increasing	
Percentage of highly urbanized and other major urban centers within ambient air quality guideline value (i.e., Particulate Matter [PM] 10 and PM 2.5) increased (%)	55 (2016)			Increasing	
Solid waste diversion rate increased (%)	Metro Manila (MM): 48; Outside MM: 46 (2015)	70	75	80	80
Percentage of healthcare waste managed (%)	66 (2016)	100	100	100	100
Area assessed and mapped for soil fertility status and soil fertility management increased (ha)	1,000,000 (2016)	450,000	450,000	450,000	2,700,000
Area of land degradation hotspots decreased (ha, cumulative)	2,300,000 (2016)	2,100,000	2,050,000	2,000,000	2,000,000
Subsector Outcome: Resilience of communities and their livelihood increased					
Percentage of local government units (LGU) with climate change and disaster risk-informed plans increased (%)	CLUP: 34 CDP: 0 (2016)			Increasing	
	LDRRMP: 0 (2016)	100	100	100	100
	LCCAP: 0 (2016)	74	75	100	100
Number of LGUs with operating early warning systems (EWS) in place increased	1,180 (2016)			Increasing	
Number of fully-functional DRRM operations centers increased	Permanent: 775 (2016)			Increasing	
	Temporary: 810 (2016)			Increasing	
Employment from biodiversity-friendly enterprises and other sustainable resource-based industries increased (cumulative)					
From NIPAS-PAs and ecotourism sites	1,484 (2016)			Increasing	
From reforestation and non-timber/agroforestry enterprises (i.e. National Greening Program [NGP], Community-based Forest Management [CBFM])	114,584 (2016)			Increasing	

Strategic Framework

For a healthy and resilient Philippines, the government will intensify the protection, conservation, and rehabilitation of natural resources and accelerate the adoption of innovative technologies for enforcement and monitoring of wildlife and habitat. Law enforcement will be further strengthened to enhance compliance with environmental standards and safeguards and consequently improve environmental quality.

Innovative waste and pollution abatement measures will also be implemented to address the increasing waste and other pollutants generated from COVID-19 response measures, among others. The resilience of resource-dependent communities and their livelihood will be enhanced by strengthening capacities to undertake CCAM-DRRM actions and expanding sustainable economic opportunities from natural capital.

Figure 20.1. Strategic Framework to Ensure Ecological Integrity, Clean and Healthy Environment



Strategies

To achieve the Plan's targets, sector-specific and cross-cutting strategies will be implemented.

Sustaining biodiversity and ecosystem services

To sustain biodiversity and the provision of ecosystem services, demonstration effects from natural resources protection, conservation, and rehabilitation efforts will be replicated and scaled up by building on the increased multi-stakeholder involvement and existing opportunities for inter-agency convergence. Capacities and competencies for data generation, assessment, and tracking of the state of natural resources, including its ecosystem services, will be enhanced. Complementing these are the necessary investments for research and development (R&D), as well as innovative monitoring technologies that will support habitat and wildlife protection and help safeguard the country from zoonotic diseases arising from unsustainable and illegal wildlife consumption and trade.

Intensify protection, conservation and rehabilitation of natural resources.

Ecosystem-based actions and area-based management will continue to be prioritized to protect terrestrial and coastal and marine ecosystems while supporting the natural and assisted rehabilitation of degraded habitats. Conservation and sustainable use of natural resources will also be strengthened to ensure continuous provision of essential ecosystem goods and services to optimize their contribution to the economy, food security, and overall well-being of people.

Terrestrial Ecosystems

Forest and critical watersheds including inland wetlands and caves

- ***Prioritize interventions and investments to accelerate and improve forest protection and reforestation activities in critical watersheds.*** Integrated and science-based restoration approaches, such as forest landscape restoration, will be used to rehabilitate the remaining unproductive, denuded, and degraded forest areas, including critical watersheds. The LGUs, private sector, and communities will, once more, be engaged in community-based forest and watershed management to ensure that the remaining natural forests and reforested areas remain intact and protected. These strategies are geared towards ensuring uninterrupted supply of water to meet the country's demand for domestic, agricultural, health and sanitation, and industrial uses, and other forest ecosystem services.
- ***Enhance water conservation and efficiency measures to avert water shortage.*** Nature-based solutions, aside from hard infrastructure, will be pursued to enhance water use efficiency and conservation. Support will be given for the establishment of riparian buffer strips, restoration of natural floodplains, and aquifer recharge.
- ***Continue and scale up the conduct of comprehensive water resource assessment in groundwater critical areas and major river basins for sustainable water supply.*** This will support evidence-based planning and guide sustainable allocation of water resources, assessment, and simulation of current and potential future scenarios for surface and groundwater resources.
- ***Delineate production and protection forests.*** The areas within forestland that will be made available for development and private sector

investment (production zones) and those reserved for protection and conservation activities (protection zones) will be identified. This way, appropriate management arrangements in the forestlands can be established and protection and rehabilitation efforts for protected areas and ancestral lands can be harmonized.

- ***Optimize the implementation of the NIPAS Act, as amended, to improve the management of terrestrial protected areas.*** Specifically, the Department of Environment and Natural Resources (DENR) will (a) conduct regular monitoring of protected area management to gauge effectiveness, and (b) implement a biodiversity assessment and management system starting with determining baseline conditions of habitats and species (e.g., species richness and abundance).
- ***Improve the management and sustainable use of inland wetlands and their resources.*** The DENR will (a) conduct biophysical and sociocultural assessments of inland wetlands to determine those for conservation and rehabilitation; (b) strengthen enforcement of legal easement, hazard zones, and other environmental regulations to ensure sustainable use of inland wetlands in coordination with LGUs; and (c) continue to utilize market-based instruments to promote conservation and proper management of inland wetlands.
- ***Scale up sustainable management of caves and cave systems.*** The DENR cave survey, assessment, and classification activities will be scaled up to identify caves with high conservation value for protection. Policies to develop caves as ecotourism attractions and monitor/manage visitor impact, while ensuring compliance with safety and sanitation standards, will be formulated and implemented by the DENR, the Department of Tourism (DOT), and the LGUs.
- ***Conduct research on terrestrial ecological connectivity to support biodiversity corridors.*** Research studies that examine the ecological

needs and natural behavior of wildlife species will be pursued to inform development of biodiversity corridors. The corridors intend to link terrestrial protected areas to ensure uninterrupted areas of forest and other habitats, which support the entire life cycle of birds and other important wildlife species.

Land and Mineral Resources

- ***Complete Rapid Land Tenure Appraisal (RLTA) to identify patentable lands and facilitate issuance of free patents (i.e., residential and agricultural).*** Partnership and coordination among land-related agencies and the LGUs will be intensified and land titling processes will be streamlined. These will hasten land survey and titling activities and address concerns on idle private lands for optimal use, such as for agriculture and forestry purposes, among others (*see Chapter 8*). The LGUs will also be encouraged to adopt their zoning ordinances based on best-use assessment of land assets and enable implementation of their CLUPs.
- ***Pursue the mapping of Indigenous Cultural Communities/Indigenous Peoples (ICCs/IPs) to facilitate the recognition of ancestral lands/domains.*** The country's various ICCs/IPs will be identified and mapped with the issuance of Certificate of Ancestral Domain Title (CADT) and Certificate of Ancestral Land Title (CALT), and provided with assistance in the preparation of their Ancestral Domain Sustainable Development and Protection Plan (ADSDPP). This will help address overlaps, particularly in forestlands, protected areas, and ancestral domains/lands.
- ***Rationalize and enhance the free, prior, and informed consent (FPIC) process for the protection of indigenous peoples' rights and interests in their ancestral domains.*** The National Commission on Indigenous Peoples (NCIP) will rationalize the process for issuance of FPIC clearances to promote genuine protection of the rights of IPs and ICCs, and ensure their active engagement in the

governance of natural resources within their ancestral domain based on their own plans and priorities.

- **Improve compliance with environmental and social safeguards for mineral resources development.** The DENR will:

- Strengthen regulatory enforcement, M&E, and reporting mechanisms through the:
 - Conduct of objective, science-based, and fact-finding reviews of large- and small-scale mining operations, including mineral processing plants;
 - Enhancement of the participation of the mining industry in the Extractive Industries Transparency Initiative to ensure greater transparency and accountability in the management of natural resources; and
 - Development and adoption of a more stringent monitoring instrument (e.g., scorecard) for assessing compliance of mines under exploration, production, and care and maintenance.
- Ensure that plans and programs for large-scale mining operations (e.g., Safety and Health Program, Final Mine Rehabilitation and/or Decommissioning Plan, Social Development and Management Program and Environmental Protection and Enhancement Program) and small-scale mining operations (e.g., Community Development and Management Plan and Potential Environmental Impact Management Plan) are aligned with the local land use and development plans;
- Continue research and development to determine the appropriate strategies that will address the mercury contamination of Palawan Quicksilver Mine, Inc. as part of the rehabilitation (i.e., bio-remediation), and facilitate the smooth turnover of management (i.e., protection and maintenance) to the LGU at the end of the project;
- Strengthen the *Minahang Bayan* scheme to avoid proliferation of illegal small-scale

mining activities and ensure that operations are undertaken only under legitimate contracts/permits and within legitimate/designated areas by:

- Revisiting the implementation of the People's Small-scale Mining Act of 1991 (RA 7076) particularly the definition and coverage of small-scale mining;
- Easing the application requirement of *Minahang Bayan* scheme; and
- Increasing the penalty provisions to approximate the value of environmental and health damages and intensify the anti-illegal mining efforts.

Coastal and Marine Ecosystems

- **Complete stocktaking of coastal and marine habitats and species diversity.** The extent and condition of the country's coastal and marine habitats, such as coral reefs, mangroves, and seagrass beds, will be determined to support a more effective planning and programming for the sector. The species and genus diversity of these habitats will be assessed with the implementation of the Coastal and Marine Ecosystems Management Program (CMEMP) and the NIPAS Act, as amended, among others.
- **Optimize the increased coverage of MPAs as a habitat of biologically and economically important species through MPA networking.** In view of the declining performance of the fisheries sector (*see Chapter 8*), it is important to ensure that appropriate management measures are established in the country's MPAs, based on ecological connectivity and biophysical assessments. To scale up MPA networking, more ecological connectivity studies will be undertaken to effectively protect and conserve the entire life cycle of fish and other marine species.
- **Pilot-test existing innovative technologies for rehabilitation of coastal habitats.** Innovative technologies will be pilot-tested to fast-track rehabilitation of degraded coastal and marine

habitats (e.g., massive coral larval reseeded), and support replication and scaling-up.

- **Complete delineation of municipal waters.** Continuous support and technical assistance from the National Mapping and Resource Information Authority (NAMRIA) will be provided to LGUs to fast-track municipal water delineation, while the guidelines for delineation of municipal waters with offshore islands will be finalized by the Department of Agriculture - Bureau of Fisheries and Aquatic Resources (DA-BFAR). Spatial planning within the delineated municipal waters will also be pursued to determine the protection and multiple use zones.
- **Enhance multi-stakeholder coordination and capacity on coastal and marine resources management aligned with the country's international commitments and related sector initiatives (e.g., coral triangle initiative on coral reefs, fisheries, and food security).** Program convergence budgeting and cooperation among the DA, the DENR, and the Department of the Interior and Local Government (DILG), as well as between and among the LGUs, will be pursued to ensure complementary actions within national and locally-managed marine protected areas, fisheries management areas, and fish sanctuaries within municipal waters, and support ecosystem approach to fisheries management (EAFM) (see Chapter 8). Inventory and monitoring of locally-managed MPAs and other local coastal resource management (CRM) interventions will be conducted through the Fisheries Compliance Audit of the DILG.

Biodiversity and Genetic Resources

To sustainably harness the economic potential of terrestrial, coastal, and marine biodiversity, and genetic resources, especially their medicinal and pharmaceutical properties for various zoonotic diseases, the following strategies will be pursued:

- **Develop a system for access and benefit sharing (ABS) of wealth from genetic resources.** The national policy framework on ABS will be

finalized and adopted, to enhance regulatory measures and facilitate sharing of economic benefits from the use of genetic resources and traditional knowledge. Permitting protocols on marine scientific research will also be strengthened.

- **Develop a bioprospecting and biotechnology program to facilitate discovery and development of novel compounds and derivatives for pharmaceutical purposes.** Priority will be given to studies on zoonosis in selected wildlife reservoirs and natural resources with potential antibacterial/antiviral properties and treatments that can be used for pharmaceutical applications.
- **Establish a clear mechanism for encouraging private sector investment and civil society participation in biodiversity conservation and sustainable use.** The DENR will formulate clear guidance and systems for facilitating private sector investment and promoting cohesive participation of civil society organizations (CSOs), given their vital role in raising public awareness on the benefits of keeping biodiversity intact.

Scale up adoption of innovative technologies for enforcement and monitoring of wildlife and habitat integrity.

- **Strengthen law enforcement and intensify the use of technological innovations for improved surveillance activities to combat illegal wildlife trade, and deter illegal, unreported, unregulated fishing (IUUF).** The use of innovative technologies (e.g., unmanned aerial vehicles, Visible Infrared Imaging Radiometer Suite, satellite-based Vessel Monitoring System) will be intensified to help in patrolling and policing to protect wildlife, prevent habitat encroachment and emergence and spread of zoonotic infectious diseases, and combat IUUF. This will be complemented with stricter inspection protocols at checkpoints, airports, and seaports, to combat illegal wildlife trade.
- **Modernize habitat monitoring and impact**

evaluation of management interventions. Available technologies and digital platforms (e.g., satellite image-sharing platforms, remote sensing, geospatial mapping) will be utilized for regular and real-time monitoring of terrestrial and coastal and marine habitats. This will facilitate modernized data generation and analysis for more efficient evaluation of impacts and assessment of effectiveness of various management interventions implemented.

Improving environmental quality

The government, private sector, businesses, and individuals will be enjoined to take collective and concrete actions to achieve a clean and healthy environment. Strategies will focus on eliminating the long-term impact of pollution on biodiversity, the ecosystem, and public health.

Strengthen enforcement, regulation, and monitoring of environmental compliance and management interventions.

The enforcement, regulation, and monitoring of compliance with existing environmental laws and regulations will be intensified to implement the necessary operational mechanisms to address the impact of the COVID-19 pandemic, rapid urbanization, and climate change on environmental quality.

Air Quality Management

The air quality compliance monitoring activities of the DENR will be complemented by more aggressive implementation of the vehicle emission-testing program and no-contact apprehension policy of the Department of Transportation (DOTr) and the Land Transportation Office (LTO). The DENR will also designate attainment and non-attainment areas in existing airsheds and implement necessary action plans to comply with the National Ambient Air Quality Guidelines Values.

Upgrade air pollution control and emission regulatory systems

- For mobile sources, prior to issuance of Certificate of Conformity (COC) by the DENR, the actual inspection of new imported motor vehicles will be strengthened to ensure compliance with the EURO IV Emission Limits requirement. The DENR, the DOTr, and the Department of Trade and Industry (DTI) will expedite the issuance of procedural guidelines on the National Motor Vehicle Inspection and Maintenance Program (NMVIMP) for public and private vehicles, and implement the public utility vehicle (PUV) modernization program. The Civil Aviation Authority of the Philippines (CAAP), in cooperation with the International Civil Aviation Organization (ICAO), will implement the Carbon Offsetting and Reduction Scheme for International Aviation (CORSA).

- For stationary sources, the DENR will review the Emission Standards for Stationary Sources in attaining cleaner air quality in industrial and commercial areas. Streamlining the stack emission testing, installation of Continuous Emission Monitoring System (CEMS), permitting and inspection of industries, will be reinforced through the implementation of Industrial Emission Management Program (IEMP).

- For area sources, the DENR will provide support to the LGUs to strengthen the implementation of environmental local ordinances (e.g., ban on smoking in public places and open burning or *sigá*), especially within designated airsheds.

Modernize air quality monitoring systems of the DENR-EMB

- Develop a more stringent air quality index for PM 2.5, standard for regulating and monitoring black carbon (i.e., PM1), and ambient air quality standards/guideline values for Hazardous Ambient Air Pollutants.

- Repair, upgrade, and increase the number of air quality monitoring stations and install backup systems to ensure adequate data capture, including regular preventive maintenance to lessen equipment breakdown.
- Develop and utilize digital, modelling, and remote sensing technologies for air pollution monitoring in partnership with the Department of Science and Technology (DOST).
- Develop and/or utilize locally-available technologies for ambient and indoor air pollution control.
- Strengthening marine pollution regulations and expanding shore reception facilities in seaports for the collection and disposal services of wastes generated from ships through collaboration among concerned agencies (e.g., DOTr, Philippine Coast Guard [PCG], Maritime Industry Authority [MARINA], Philippine Ports Authority [PPA], and Cebu Port Authority [CPA]).

Accelerate the establishment of domestic wastewater treatment facilities and its conveyance system. The DPWH, the DENR, and the DOH will continue to enhance the institutional and technical capacities of LGUs, water districts, and concerned entities to implement sewerage and septage projects under the National Sewerage and Septage Management Program (NSSMP), and mobilize other financial support on wastewater treatment.

Water Quality Management

Strengthen the regulation of point sources (e.g., discharges from industries and treatment plants) and nonpoint sources (e.g., agricultural farms and residential areas) of pollution by:

- Expediting the nationwide inventory and classification of waterbodies, and establishment of water management systems in priority waterbodies;
- Refining and expanding the Environmental User Fee System (EUFS) to cover all pollution sources (i.e., domestic, industrial, commercial, and agricultural), and to properly reflect the value of environmental damages;
- Designating the non-attainment areas¹ for waterbodies where pollutants exceed the water quality guidelines to prevent new sources of effluent concentration and discharge from adversely affecting water quality;
- Designating and operationalizing the required number of Water Quality Management Areas (WQMAs), including updating of its Action Plans; and
- ***Modernize water quality monitoring systems by:***
 - Repairing, upgrading, and increasing the number of fully-operational ambient water quality monitoring stations; and
 - Enhancing capacity for laboratory analysis and exploring the use of advanced remote sensing and unmanned aerial vehicle (UAV) technologies in monitoring water quality.

Land Quality Management

To manage the potential increase in volume of infectious waste materials (e.g., disposable masks and PPEs) and solid wastes from single-use packaging materials in households, health care facilities, and other establishments, the LGUs will need to prioritize the (a) approval and/or implementation of their approved 10-year solid waste management (SWM) plans; (b) closure of dumpsites; and (c) clustering of waste management facilities through inter-LGU partnership.

¹ Pursuant to the Philippine Clean Air Act of 1999 (RA 8749), the DENR in coordination with the LGUs, shall designate these non-attainment areas of waterbodies where pollutants have exceeded water quality guidelines to prevent new effluent concentration and discharges.

Fast-track the implementation of waste management measures for solid, toxic, and hazardous wastes, including electronic waste, especially at the local level through:

- Engagement among SWM regulators, users, service providers, and intermediaries to ensure that cities, municipalities, and barangays have fully-functional materials recovery facilities (MRF) by conducting regular onsite maintenance and operational trainings;
- Capacity development of the LGUs to implement a proper monitoring and reporting scheme on SWM, development of methodology for estimation of waste diversion, and strengthening the monitoring and evaluation of effectiveness of SWM programs by the National Solid Waste Management Commission (NSWMC);
- Implementation of community-based composting of food wastes and other biodegradable materials and linking households to composting market/industry for commercial viability;
- Formulation of a policy on the management and monitoring of e-wastes and institutionalization of extended producer responsibility (EPR); and
- Streamlining the management of health care and infectious wastes, especially at the community and household levels by:
 - Ensuring compliance of healthcare facilities² and treatment technologies³ with the standards for hazardous waste management and handling new pathogens or viruses;
 - Modernizing and increasing the number of Treatment Storage and Disposal (TSD) facilities for handling infectious

healthcare wastes. Support will be given to mobilize public-private investments in the construction and accreditation of additional TSD facilities;

- Improving disposal of healthcare wastes at the household or barangay level, especially in areas with limited access and capacity to transport to TSD facilities; and
- Establishing partnerships between and among LGUs and TSD-accredited facilities to ensure that untreated healthcare wastes do not reach MRFs and sanitary land fills (SLF).

• ***Promote sustainable land management (SLM) to arrest land degradation.***

- Integrate SLM practices into national and local development plans;
- Improve local capacities and skills for planning and management of land resources, and strengthen awareness and advocacy campaigns; and
- Scale up and promote SLM in production landscapes and within multiple-use zones, among others.

Adopt and implement innovative pollution abatement solutions.

- ***Support reforms on mass transport system, including the expansion of ride-sharing services*** to reduce proliferation of vehicles, and promote the production and utilization of eco-friendly vehicles, as well as the use of non-motorized transport through the establishment of bicycle lanes and replication of local bike-sharing systems (*see Chapter 19*).
- ***Encourage development of walkable cities and major urban areas*** to improve built-up systems

² Based on the DOH Health Care Waste Management Manual and the DENR Revised Procedures and Standards for the Management of Hazardous Wastes.

³ New and existing technologies need to undergo Environmental Technology Verification of the DOST-Industrial Technology Development Institute and comply with the applicable environmental standards and the DOH-required level of microbial destruction or inactivation to eliminate bacteria/virus.

of urban environment, and expand green and open urban spaces and green infrastructure to improve health and well-being of people and the environment (e.g., reduce carbon emissions).

- **Support wastewater reclamation/recycling and reuse** for next intended use (e.g., indoor use and irrigation purposes) and promote other cleaner production techniques to control the discharge of pollutants (e.g., use of organic fertilizers and biopesticides).
- **Strengthen public-private partnerships (PPP)** to create opportunities for low-cost pollution-control and treatment technologies. Capacity development of the private sector and promotion of available incentive mechanisms to adopt cleaner technologies in its operations (e.g., factories and power plants) will be encouraged.
- **Establish synergies with research and development institutions** to undertake studies on technological solutions and water pollution abatement measures.

Increasing resilience of communities and their livelihood

Strengthen national and local capacities for climate and disaster risk reduction and management.

In partnership with research institutions and development organizations, the government will prioritize the development and adoption of appropriate baseline information and indicators to measure resilience of ecosystems and communities (i.e., resilience index), and set up a systematic database to regularly monitor sectoral emissions reduction. To ensure the implementation and effectiveness of CCAM and DRRM initiatives vis-à-vis Sustainable Development Goals (SDGs), Sendai Framework for Disaster Risk Reduction, and Paris

Agreement commitments, the following strategies will be implemented:

- **Enhance accessibility of climate and geospatial information and services by:**
 - Developing a data protocol to facilitate access and sharing of available scientific researches and studies, geospatial information, climate trends and projections, risk estimation models, gender-related variables, and disaggregated loss and damage datasets on vulnerable and affected groups. Technical support will be provided to LGUs on integrating these information in the local planning databases; and
 - Establishing integrated knowledge management systems to serve as platforms for sharing, managing, and reporting climate change/disaster risk reduction (CC/DRR)-related information.
- **Integrate CCAM-DRR considerations in public investment programming processes.** The NEDA and other concerned implementing agencies will ensure that climate and disaster risk parameters are mainstreamed in the design and ex-ante evaluation of programs and projects toward ensuring their long-term sustainability.
- **Fast-track and prioritize the development of guidelines and standard quality assurance review tools and streamline local planning and review mechanisms** (i.e., DILG for CDPs; Department of Human Settlements and Urban Development [DHSUD] for CLUPs; Office of Civil Defense - National Disaster Risk Reduction and Management Council [OCD-NDRRMC] for Local DRRM Plans; and Climate Change Commission [CCC] for LCCAPs).
- **Strengthen existing mechanisms to harmonize the monitoring of CCAM and DRRM expenditures at the national and local levels.** The Department of Budget and Management (DBM), the CCC, and the OCD-NDRRMC will prioritize and enhance climate budget

tagging to cover actual expenditures and establish a similar budget-tagging arrangement for DRRM.

- **Enhance the capacity of the government to address the multidimensional risks arising from natural hazard events, including biological hazards by:**
 - Updating the local DRRM and LCCAPs to include public health emergencies and climate and disaster risk parameters to ensure better preparedness and response to pandemics while mitigating impacts of climate-related disasters;
 - Sustaining support to promote business and public service continuity planning and ensuring the development of climate and disaster-resilient structures and designs following established measures and standards;
 - Providing technical assistance to national government agencies (NGAs), LGUs, private sector, and community organizations to: (a) maximize access to CCAM and DRRM financing and risk transfer mechanisms; and (b) implement ecosystem-based adaptation (EbA) measures that are risk-informed, gender-responsive, and sensitive to the needs, benefits, and priorities of men and women, while taking into account indigenous knowledge systems; and
 - Undertaking gender analysis to identify gender issues related to capacity of both men and women, especially in vulnerable communities, to engage in decision-making processes, project development, implementation, and monitoring of CCAM and DRRM actions.

Expand sustainable livelihood and economic opportunities for resource-dependent and vulnerable communities.

As upland and coastal communities remain among the poorest sectors of society, the development of more sustainable livelihood and other economic opportunities will be pursued in cooperation with

relevant agencies (e.g., DTI, Department of Social Welfare and Development [DSWD]) to increase their socioeconomic resilience.

- **Intensify agroforestry development and establishment of commercial forest plantations.** Commercial forest plantations within integrated forest management agreement (IFMA), community-based forest management agreements (CBFMAs), and applicable areas in ancestral domains will be developed based on comparative advantage. There will be investment support packages to encourage diversification especially towards fast-growing native species that yield high-value timber. Community and family-based agroforestry farms, and related biodiversity-friendly enterprises will be established. Through these, traditional crop varieties will be cultivated and products using indigenous materials will be developed, such as eco-friendly personal protective equipment (PPE). To ensure sustainability and international competitiveness of the country's forest-based products, registry and forest certification systems will be institutionalized.
- **Pursue sustainable and resilient fish- and marine-based industries for blue economy development.** Sustainable fish- and marine-based industries⁴ will be developed and promoted using innovative technologies and practices and with proper sanitary and safety protocols. Climate-resilient post-harvest facilities will be provided to support value-adding activities in coastal communities. Existing community fish landing centers will be operationalized by the BFAR to cater to the needs of coastal communities for cold storage and other related support services. The overall economic contribution of the blue economy will be accounted through the ocean economy satellite accounts of the Philippine Statistics Authority (PSA).
- **Develop and promote ecotourism and cultural sites within ecological limits, and sanitary and safety standards.** The following will be pursued: (a) replicate and scale up carrying capacity studies

⁴ These industries include (a) sustainable fisheries and aquaculture; (b) ocean energy, offshore, and gas exploration; (c) shipping/marine transportation and shipbuilding; (d) coastal tourism; and (e) marine biotechnology, among others.

to support the implementation of ecotourism activities and development of new ecotourism sites; (b) develop ecotourism facilities and environment-friendly infrastructure, including ecotourism-related products and services to support livelihood of communities following proper safety and sanitation protocols; (c) conduct risk assessment necessary for developing health and safety plans and guidelines; and (d) finalize the methodology to account for employment generated from ecotourism.

- *Fast track adoption and implementation of green jobs assessment and certification criteria/guidelines, green jobs human resource development plan, and tools to monitor and account green jobs.*

Cross-cutting strategies

Review, codify, and streamline existing ENR policies, rules, and regulations to improve compliance, address conflicting provisions, and promote transparency and accountability. A comprehensive assessment and review of existing ENR laws and policies, including governance arrangements, will be undertaken. This is deemed necessary to address the overlaps and conflict in existing policies toward improving compliance, transparency, and accountability across all levels of governance. An institutional review and assessment of the agencies' existing mandates vis-a-vis the human resources, as well as technical and financial capacity required, will be conducted. Findings from this assessment will help identify concrete recommendations to improve environmental governance and better address challenges in the sector.

Upscale natural capital accounting (NCA) including valuation of ecosystem services in national and local planning and programming. The NCA provides important data and information on the stock and status of the country's ecosystems and resources. It is a tool that (a) allows more systematic collection, monitoring, and reporting of

data from both the national and local governments, including academic and research institutions; (b) facilitates informed decision-making of political leaders and local communities on conservation areas; (c) assesses trade-offs and provides better alternatives; (d) enables income and employment generation in the rural areas and creates wealth for the nation; and (e) provides incentives for the management of ENR (e.g., payments for ecosystem services).

Streamline green and climate finance in the financial sector through the formulation of a sustainable finance framework and roadmap that will support and accelerate the development of a green and sustainable economy. This includes the issuance of guidelines on green/climate finance flows, including green finance taxonomy, and protocol/processes for implementation, regulation, transparency, and institutional arrangements. Building capacities of regulators and market participants in the financial sector on internalizing environmental and climate and disaster risks in the current government and private systems will also be prioritized.

Accelerate implementation of sustainable consumption and production. In the remaining Plan period, the PAP4SCP will be rolled out to guide the government and stakeholders' programmatic actions in the short term (2022-2023), medium term (2023-2030), and long term (2030-2040). The goal is to influence behavioral change at the national, community, and individual levels, especially in consuming and producing more green goods and services, and practicing more sustainable and climate-smart lifestyles. The PAP4SCP⁵ calls for (a) the valuation of economic, social, and environmental costs and benefits of production and consumption processes by accounting the stock of natural resources and flow of ecosystem services, and (b) a set of interventions, schemes, and innovative technologies, as well as enhanced environmental education, to ensure efficient use and equitable allocation of natural resources.

⁵ Actions are categorized into the following: (a) policy and regulation; (b) research and development, innovation, and technology; (c) infrastructure; and (d) promotion and education.

Legislative Agenda

Table 20.2 Legislative Agenda to Ensure Ecological Integrity, Clean and Healthy Environment

LEGISLATIVE AGENDA	RATIONALE
National Land Use Bill	The bill aims to provide an institutional mechanism for integrating existing sector-specific land use laws and institutionalize land use planning, as basis for the rationalization, management, and development of the country's land resources.
Philippine Genetic Resources Access and Benefit-Sharing (PGRABS) Bill	The proposed measure aims to provide and institutionalize a policy framework on access and benefit sharing from the utilization of genetic resources aligned with the country's commitments to the Nagoya Protocol.
Integrated Coastal Management (ICM) Bill	This seeks to adopt ICM as a national strategy to ensure the sustainable development of the coastal and marine environment and establish supporting mechanisms for its implementation.
Amendment of the Wildlife Act	This aims to strengthen the protection of the country's wildlife resources by (a) increasing the fees and penalties for violators and (b) defining and implementing sanitary and phytosanitary measures to address possible entry of zoonotic infectious disease into the country (e.g., standards and protocols for crops, livestock, fisheries, and wildlife).
Forest Limit Bill	The proposed bill intends to delineate the specific limits of forestlands for the conservation, protection, and development of the country's forest resources.
Sustainable Forest Management Bill	This seeks to institutionalize the (a) development of sustainable forest management strategy based on the allocation of forestland uses (i.e., production and protection zones), (b) enhancement of private sector participation, and (c) forest certification, monitoring, assessment, and reporting system.
Maritime Zones Bill	This bill intends to define the limits of the different maritime zones over which the country can exercise sovereignty (i.e., territorial sea) and sovereign rights (i.e., exclusive economic zone). This will support the implementation of measures to sustainably manage fisheries and other resources in these maritime zones.
Philippine Archipelagic Sea Lanes Bill	This intends to define the limits of Archipelagic Sea Lanes. Foreign ships will have to confine their navigation within the sea-lanes to ensure that vessels will not pass through MPAs and marine habitats are protected from shipping-related activities.
Proper Management of Electronic Wastes (E-Wastes) Bill	The proposed bill intends to institutionalize mechanisms and guidelines/standards for proper collection, handling/storage, and disposal of electronic wastes.

LEGISLATIVE AGENDA	RATIONALE
Department of Disaster Resilience Bill	This bill aims to provide a clear operational framework to address the fragmented institutional functions and actions among concerned agencies on climate change and disasters by establishing a Department that will serve as the primary agency responsible for leading the coordination, implementation, monitoring, and reporting on climate change and DRRM.
Philippine Environmental Assessment System to cover Strategic Environmental Assessment (SEA) Bill	The proposed measure aims to ensure that possible environmental consequences of policies, plans, and programs are fully accounted for at the earliest stage of decision-making consistent with economic and social considerations. This will also strengthen the use of the Environmental Impact Statement System, as a planning and monitoring tool.
Amendment of the Ecological Solid Waste Management Act, Clean Water Act, Clean Air Act, and Toxic Substances, Hazardous and Nuclear Wastes Control Act	The proposed legislation seeks to provide higher penalties and stringent measures for environmental protection. It also intends to bridge the policy gap between municipal waste management and health care waste management by streamlining protocols on the management of hazardous wastes, particularly infectious wastes, at the community and household levels. These bills will also contain better enforcement against mixed waste collection and biodegradables in landfills and incentives for home composting, as well as LGU support for at-source segregation and composting.
Green Public Procurement Bill	This bill aims to strengthen green public procurement by enhancing compliance of procuring entities in integrating green criteria in the procurement guidelines, including bidding documents and technical specifications, and in setting clear LGU involvement based on market readiness.
Extended Producer Responsibility (EPR) Bill	This aims to enhance product stewardship among producers/manufacturers nationwide, who will be made responsible for the disposal and treatment of post-consumer products and help minimize pollution, especially from packaging materials of the food and beverage sector at source.
Safe Pathways Bill	The proposed bill intends to provide safe and convenient pathways for pedestrians and nonmotorized vehicles (e.g., walkways and bike lanes) and integrate these in the infrastructure development agenda. The Bill intends to create a network of pop-up bicycle lanes to connect users to essential destinations (e.g., medical facilities), designate a network of people-oriented emergency pathways, and mandate the provision of adequate parking spaces for bicycles and other non-motorized vehicles, as far as practicable, among others.
Maritime Safety, Security and Prevention of Ship-Sourced Pollution Bill	This aims to provide a Maritime Code that will implement and enforce international maritime instruments, of which the country is a state-party. These include the International Convention for the Prevention of Pollution from Ships, and its Protocols.

PART VII

**PROTECTING
THE RIGHTS,
PROMOTING
THE WELFARE,
AND EXPANDING
OPPORTUNITIES
FOR OVERSEAS
FILIPINOS**

Protecting the Rights, Promoting the Welfare, and Expanding Opportunities for Overseas Filipinos

International migration has been a significant aspect in the economic and social dynamics of the Philippines over the last four decades. In recent years, about two million Filipinos leave every year to temporarily work overseas, mainly in the Middle East and Asia. Another 80-90 thousand choose to permanently transfer to another country, mainly to the USA and Canada. Filipinos overseas send annual remittances equivalent to about 10 percent of the Philippine Gross Domestic Product (GDP).¹

With the outbreak of COVID-19, governments across the world have imposed lockdowns, disrupting economic activities and employment, including that of migrants. The pursuit of a healthy and resilient Philippines should consider the particular challenges faced by overseas Filipinos (OFs) in order to protect their rights, promote their welfare, and sustain their contribution to the country's development. The government will continuously support and assist repatriated and displaced OFs and seek to address the increased vulnerability of those who remain abroad. For those who have decided to return to the Philippines permanently, their successful socioeconomic reintegration will be prioritized. Financial inclusion initiatives for OFs and their families will also be strengthened.

Assessment and Challenges

Assessment: The first half of the Plan period has seen significant developments in international migration and development. An internationally-agreed framework for comprehensive international cooperation on migration was established; access to government services was made easier for

overseas Filipino workers (OFWs) through the additional One-Stop Service Centers for OFWs (OSSCO) and OFW Helpdesks; onsite training and competency assessments were conducted; measures to enhance the security and safety of OFs were introduced; government initiatives

¹ World Bank, *Migration and Remittances*, September 26, 2019.

enabling safe, efficient, and reliable fund transfers have contributed to the decline in remittance cost; and financial inclusion initiatives have channeled more remittances into savings and investment.

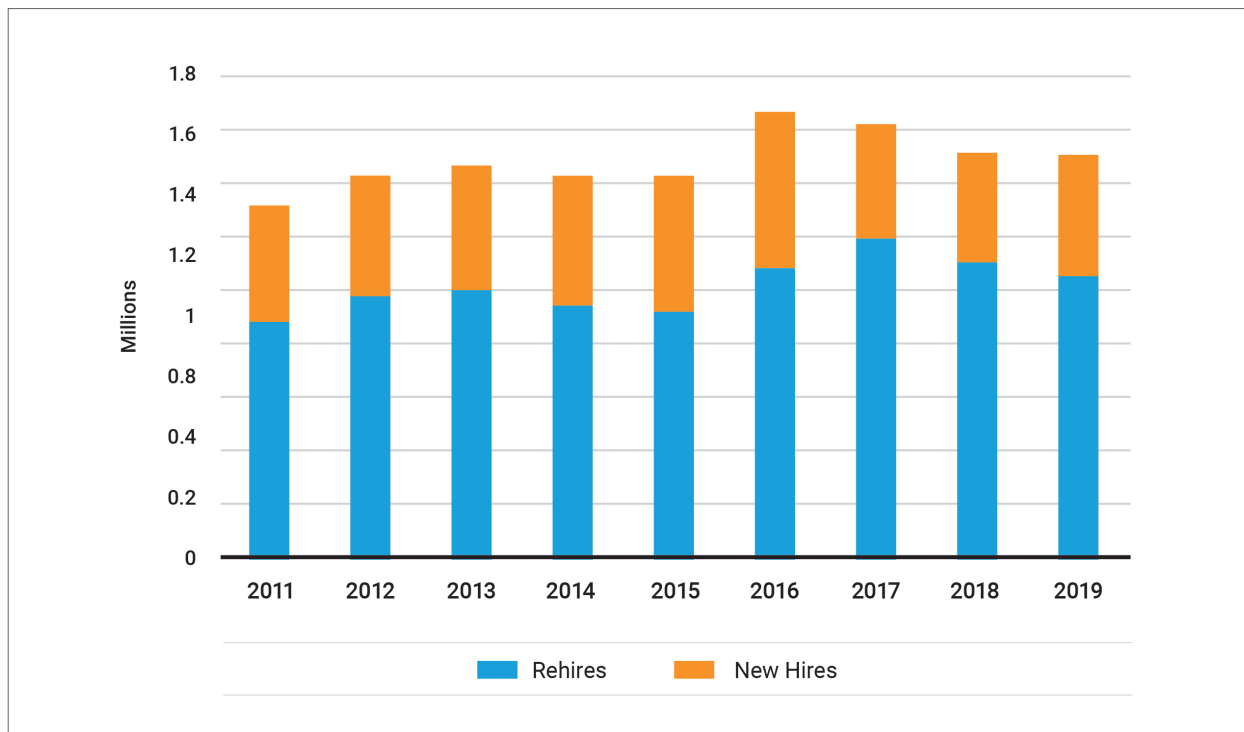
The Universal Healthcare Act, Social Welfare Attaché Act, Handbook for OFWs Act, and the Social Security Act of 2018 were enacted to enhance the social protection afforded to OFWs. The first National Migration Survey was also conducted in 2018 to address the need for baseline data on the international mobility of Filipinos.

However, the pandemic has displaced migrant workers, including OFWs. As of early August 2020, the Department of Labor and Employment (DOLE) has received close to 600,000 applications for cash assistance from onsite and repatriated OFWs. Almost 230,000 returning overseas Filipinos (ROFs) have arrived, of which over 120,000 had been repatriated by the Department of Foreign Affairs (DFA). In addition, there are almost 9,800 confirmed COVID-19 cases (and more than 700 deaths) among OFWs based

on DFA data. Among the ROFs, 4,904 were confirmed COVID-19 cases, among whom five have passed away.

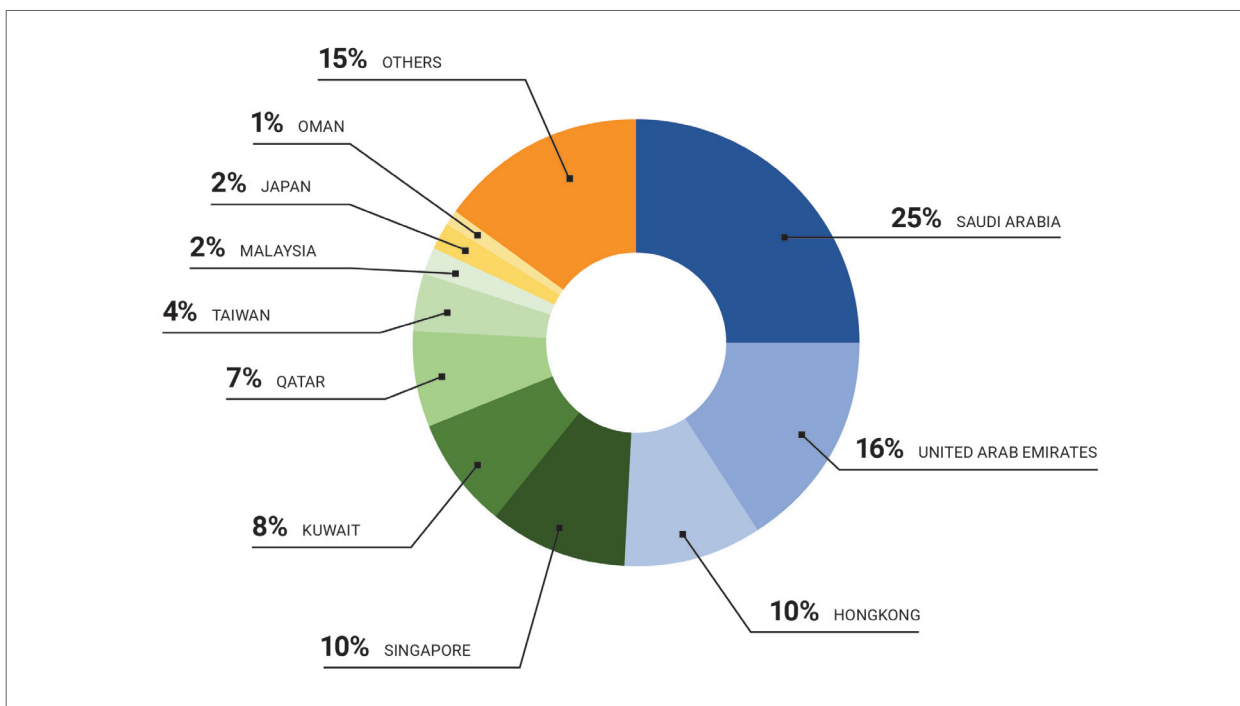
Challenges: With the pandemic and the subsequent global recession, the unprecedented volume of OFs intending to return and those who have already returned will put pressure on the capacities of OF-serving agencies in providing assistance and reintegration programs. Returning OFWs will face a weak labor market in the country amidst social distancing measures and an economic slowdown. Meanwhile, those who will choose to continue to stay abroad face increased vulnerabilities as the pandemic transforms economies, resulting in shifts in labor demand, aggravated by inadequate social protection. Demand for workers in the healthcare sector and manufacturing of essential goods is expected to remain strong, while it may decline in other sectors such as tourism and retail. Furthermore, the impact of lower remittances will be felt by many Filipino households.

Figure 21.1 Overseas Filipino Worker (OFW) Deployment, Land-based, 2011-2019



Source: Philippine Overseas Employment Administration (POEA)

Figure 21.2 OFW Deployment by Destination Country, 2019



Source: POEA

Targets

Table 21.1 Updated Plan Targets to Protect the Rights, Promote the Welfare, and Expand Opportunities for Overseas Filipinos to Contribute to the Country's Development

INDICATOR	BASELINE VALUE (YEAR)	TARGETS			
		2020	2021	2022	END OF PLAN
Sector Outcome: Protect the rights, promote the welfare, and expand opportunities for overseas Filipinos to contribute to the country's development					
Percent of documented OFs to total OFs increased	92.3 (2019)	Increasing ^h	Increasing ^h	Increasing ^h	Increasing ^h
Philippine ranking on the US index on trafficking in persons maintained*	Tier 1 (2019)	Tier 1	Tier 1	Tier 1	Tier 1
Percent share of active to total members of Overseas Workers Welfare Administration (OWWA) increased (%)**	28.9 (2016)	25.0	25.0	25.0	25.0
Voter turnout increased (%)*	31.3 (2016)	N/A	N/A	40.0	40.0

INDICATOR	BASELINE VALUE (YEAR)	TARGETS			
		2020	2021	2022	END OF PLAN
International remittance costs as a proportion of the amount remitted reduced (%)	4.7 (2016)	<4.0	<3.5	<3.0	<3.0
Percent of returnees successfully engaged in an income generating activity**	103.2 (2019)	100.0	100.0	100.0	100.0

Notes: * new indicator; ** revised indicator; ^h –increasing from previous year; tbc – to be confirmed

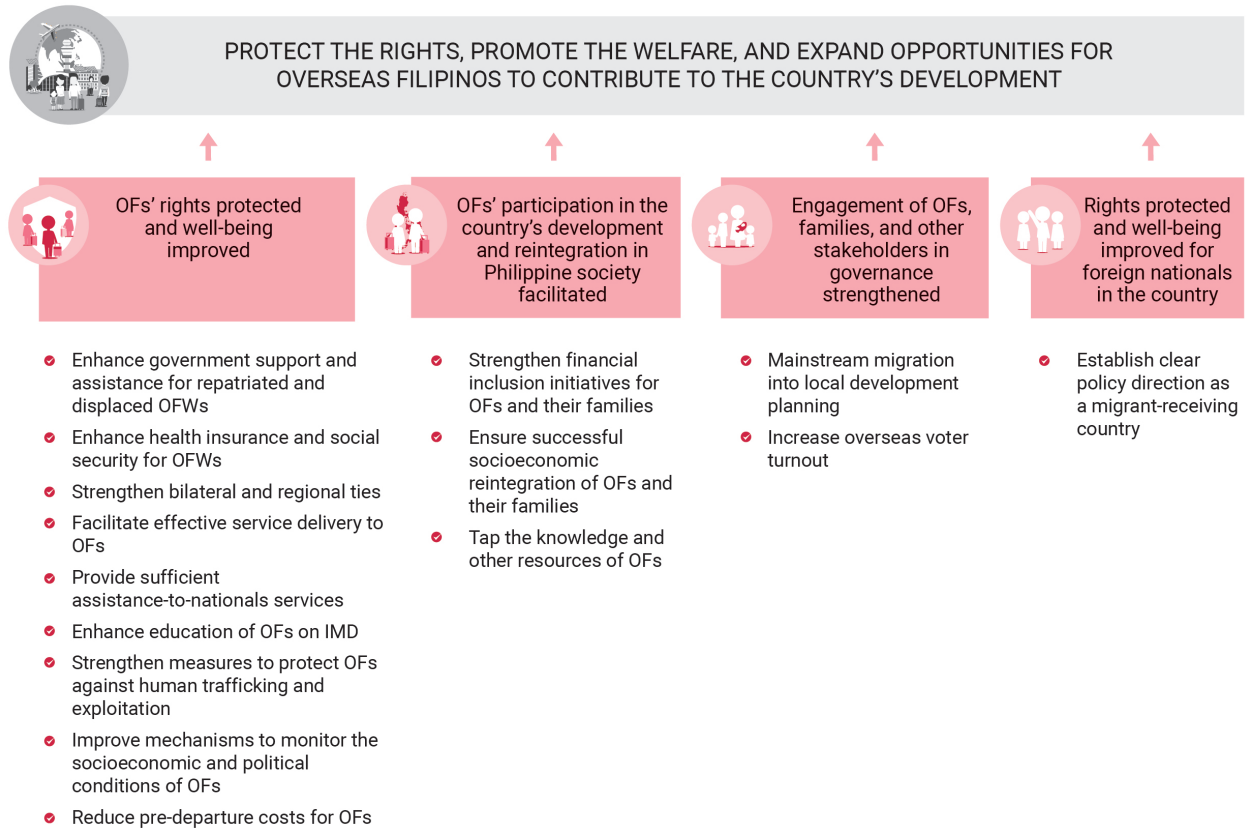
Strategic Framework

During the formulation of the Philippine Development Plan (PDP) 2017-2022, international migration and development (IMD) issues were mainstreamed in nine out of the 15 main chapters. These are the chapters dealing with governance, justice, culture, industry and services, human capital development, reducing vulnerabilities, science and technology, financial inclusion, and security and safety. This reflects the crosscutting nature of migration and the need for a whole-of-government approach.

For this updated PDP, this chapter has been added to ensure greater coherence and comprehensiveness in discussing issues, relevant indicators, and strategies in relation to migration and development, towards a healthy and resilient Philippines. In line with this, new indicators to better monitor the government's progress on improving migration governance and harnessing the full benefits of migration towards sustainable development have been identified.

The framework used in 2017 focused on protecting the rights and improving the well-being of OFs, whether here or abroad, strengthening their engagement in governance, and facilitating their participation in the country's development and reintegration. For this update, the framework has been enhanced in line with the new normal and the commitments under the Global Compact for Safe, Orderly, and Regular Migration (GCM). Thus, the enhanced framework seeks to cover all dimensions of migration, as well as both OFs and foreign nationals in the Philippines.

Figure 21.3 Updated Plan Targets to Protect the Rights, Promote the Welfare, and Expand Opportunities for Overseas Filipinos to Contribute to the Country's Development



Strategies

In line with the enhanced framework on migration, the following strategies have been expanded to ensure that the Chapter's objectives will be pursued accordingly.

Protecting OFs' rights and improving their well-being

Enhance government support and assistance for repatriated and displaced OFWs. With the unprecedented volume of repatriates and displaced migrant workers, the government must ensure that all affected OFs, especially OFWs, are provided adequate assistance to overcome the crisis.

The absorptive capacity of OF-serving agencies will be improved by streamlining agencies' operations and enhancing their workforce utilization to cater to OFs' needs better.

Moreover, the government will explore hiring repatriated OFs as healthcare workers, contact tracers, personnel for the Build, Build, Build (BBB) projects, the Philippine Identification System (PhilSys), and Community-Based Monitoring System (CBMS), among others. Along with these initiatives, the government will intensify the retooling and skills upgrading programs for displaced and repatriated OFWs (especially for telecommuting and e-commerce-friendly jobs) to keep them competitive whether in the domestic or international labor markets.

Concurrently, the government will facilitate the movement of OFWs, especially essential workers needed by the global economy, without compromising the needs of the local economy. The government will also explore options to support the recovery of the recruitment industry.

Enhance health insurance and social security for OFWs. Given the unprecedented volume of migrants needing assistance due to the pandemic, the operating funds of migrant-serving agencies will be augmented to facilitate welfare and health-related (including mental health) programs and emergency response at posts.

Information campaigns on the importance and benefits of health insurance and social security for OFWs and their families will be intensified. Among others, such information shall be incorporated into orientation seminars across all stages of migration. With the urgent need for convenient and contactless transactions, e-payment services for the Philippine Health Insurance Corporation (PhilHealth) and the Social Security System (SSS) will be continuously enhanced and expanded. Payment schemes for PhilHealth premiums for departing OFWs will be enhanced to enable more flexible payment terms.

Strengthen bilateral and regional ties. Negotiation of bilateral labor agreements (BLAs) with migrant-receiving countries will be intensified, especially with those practicing the *Kafala* system. BLAs with stringent welfare and protection provisions, social security agreements, and emergency response protocols will be pursued, while the inclusion of health insurance in BLAs and in the standard employment contract will be explored. BLAs will give particular attention to vulnerable groups, such as household service workers (*see Chapter 10*). Programmed bilateral labor agreements for review in 2020 include those with Morocco, Russia, Thailand, Seychelles, Micronesia, Suriname, Romania, Saudi Arabia, Trinidad and

Tobago, Portugal, Canada, Taiwan, Solomon Islands, and Switzerland, as well as a Memoranda of Agreement/Understanding on labor cooperation with Seychelles, Micronesia, and Turkey. The joint conduct of post-arrival orientation seminar (PAOS) will be explored in bilateral labor negotiations. Further, the government will continue its negotiations to create pathways to regularization for qualified but undocumented OFs.

The Social Security Act of 2018 (Republic Act [RA] 11199) also mandates the negotiation of BLAs with host countries which do not cover OFWs under their social security schemes, particularly for pension entitlement. In line with RA 11199, the requirement for foreign employers of land-based OFWs to pay SSS contributions, similar to foreign principals of sea-based OFWs, and portability of social security entitlements and earned benefits will be included in the bilateral labor agreements and their implementing administrative arrangements.

Facilitate effective service delivery to OFs. Deploying mobile government representative offices overseas will improve the provision of basic services to OFs. To help empower the OFs onsite, scholarships, training assistance, and competency assessments shall be provided. The Technical Education and Skills Development Authority's (TESDA) Onsite Assessment program and the Professional Regulation Commission's (PRC) Special Professional Licensure Examinations will be expanded. Moreover, government transactions that cater to OFs will be simplified. This includes the full roll out of online transactions at the Philippine Overseas Employment Administration (POEA)². Further, the government will provide online platforms for psychosocial intervention and psychological first aid to bring together trained professionals to address the psychological needs of OFs. As an organized and well-defined database on international migration would help facilitate effective service delivery, expediting the operationalization of the international migration statistics framework is necessary. To ensure

² This includes e-Registration of OFWs and Seafarers; *Balik Manggagawa* (BM) Online; POEA Online Processing System and further developing Online Direct Hire; Online Continuing Agency Education Program (CAEP); and Online Licensing and Legal Assistance.

comparability, the data collection, processing, and methodologies of migrant-serving agencies will be aligned with the framework. This will also contribute to the operationalization of the Shared Government Information System on Migration. An integrated inter-agency referral and case tracking system will also be introduced (see Chapter 5).

Provide sufficient assistance-to-nationals (ATNs) services. Additional plantilla positions and Foreign Service Posts (FSPs), especially in high-risk countries and in countries with high levels of undocumented OFs, will be prioritized. In addition, agencies' capacity to provide assistance to undocumented Filipino migrants who wish to be repatriated will be strengthened. Proper documentation before the deployment of OFWs will strengthen protection and lessen the risk of OFWs becoming undocumented (see Chapter 18).

Enhance the capability of migrant-serving agencies and consular officers on crisis preparedness and contingency planning. All Philippine FSPs will be enjoined to regularly update their respective contingency plans. The One-Country Team Approach, where overseas representatives of various government agencies act together under the leadership of the Head of Post, will be strictly observed. The Overseas Preparedness Response Team (OPRT) will ensure that coordination with relevant agencies is sustained and rapid response and relief measures are implemented efficiently (see Chapter 18).

Enhance education of OFs on IMD. The pre-employment, pre-departure, and post-arrival orientation seminars will be improved in terms of conduct and content. Enriching the orientation seminar modules to include cultural diversity, benefits and costs of migration, economic and financial literacy, and overseas voting and reintegration would better prepare OFs throughout the migration cycle. Pre-migration orientation seminars that include not only the prospective migrants but also the families left behind will also be implemented. Content will be standardized across agencies conducting the orientation

seminars. Further, local governments will be integrated as service providers in the conduct of pre-migration education training.

Exploring other modes of dissemination will also help enhance information delivery. The online presence of existing programs such as the *BaLinkBayan* may be expanded to reach a larger audience (see Chapters 5 and 15). The conduct of mobile Pre-departure Orientation Seminars (PDOS) in more areas as well as the expansion of the Community Education Program and Peer Counseling Program of the Commission on Filipinos Overseas (CFO) would help prospective emigrants make informed decisions on working or settling abroad. The Handbook for OFWs (RA 11227) will be completed and regularly distributed to serve as an important reference for migrants. Further, embassies will continue to strengthen regular engagement of Filipinos abroad by institutionalizing cultural initiatives (see Chapter 7).

Strengthen measures to protect OFs against human trafficking and exploitation. Trafficking and illegal recruitment schemes will be abated with effective use of technology-enabled platforms for information dissemination. There is also a need to capacitate more local government units (LGUs) to invest in anti-trafficking interventions. This includes seminars for duty bearers and stakeholders at the grassroots level on how, when, and where to report violations and other related laws. The Inter-Agency Council Against Trafficking's (IACAT) referral and feedback system among duty bearers and stakeholders will be improved. Service directories will be regularly updated and effective referral pathways for essential services (including healthcare, policing and justice services, psychosocial support, reporting and complaints mechanisms, and other necessary support) will be made available and accessible to all OFs. Moreover, coordination among local and international law enforcement agencies will be strengthened. The government will continue to explore ways to cooperate with other countries on combatting trafficking in persons (see Chapter 18).

Improve mechanisms to monitor the socioeconomic and political conditions of OFs.

Existing mechanisms to monitor the conditions of OFs, such as ATN Mappings and connections with Filipino communities will be complemented by mechanisms to facilitate regular gatherings to enable embassies to check the status of OFs, particularly OFWs, on a regular basis (*see Chapters 5 and 18*). The OPRT will also conduct threat and environmental scanning regularly.

Reduce pre-departure costs for OFs. Technology-enabled platforms such as online payment systems will be enhanced to address the issue of requiring payments in bulk. The burden of paying for placement and training fees will be removed from the OFW in observance of the “employer pays principle” in the recruitment process. To ensure that OFWs are not charged more than the regulations allow, recruitment agencies will be strictly monitored.

Facilitating OFs' participation in the country's development and reintegration in Philippine society

Strengthen financial inclusion initiatives for OFs and their families. Faster, safer, and cheaper transfer of remittances will be promoted by advocating the use of technology-based banking such as internet banking and mobile payment applications. To complement the reduction in costs, access to information on financial services must be enhanced through a multi-agency effort to create a centralized portal related to various financial transactions. In addition, economic and financial literacy programs catering specifically to OFs and their families, will continue to be expanded while highlighting financial planning and management. This will include the *Pinansyal na Talino at Kaalaman (PiTaKa)* Program of the Bangko Sentral ng Pilipinas (BSP) and the OWWA, information on existing government-managed

schemes, such as the SSS provident fund program, and the recently-launched digital services of the Overseas Filipino Bank among others. Furthermore, access to financial products and services will be supported by the full operationalization of the *PhilSys* which will address issues on lack of identity documents for opening bank accounts and verifying financial transactions.

Ensure successful socioeconomic reintegration of OFs and their families. The government will facilitate the smooth reintegration of Filipino migrants into Philippine society. The Comprehensive OFW Reintegration Program will be implemented fully and continuously to realize its objectives: (a) incorporation of a gender-responsive reintegration preparedness program in all phases of migration, involving both OFWs and their families left behind; (b) initiation of reintegration pathways for different OFW segments, particularly domestic workers, less-skilled workers, sea-based workers, and professionals; and (c) convergence of initiatives and harmonization of reintegration programs and services of all government agencies and organizations to ensure a comprehensive approach to reintegration.

The budget for the loan guarantee fund of the OWWA for the Enterprise Development and Loan Program (EDLP), which is administered by the agency in partnership with the Land Bank of the Philippines (LANDBANK) and the Development Bank of the Philippines (DBP), will be increased. All financial and livelihood assistance initiatives, including grants and loans, will be promoted to reach a greater number of returning Filipinos. For those seeking local employment, the government will strengthen employment facilitation services through proactive job matching, competency assessment, and certification. The convergence of the DOLE's enhanced National Skills Registration Program, the National Reintegration Center for OFWs, and OFW Skills Registry will facilitate matching of employers and employees based on the former's needs and the latter's background and skills.

Tap the knowledge and other resources of OFs.

Mechanisms through which overseas-based experts are able to share their knowledge and specializations with the academe, industry, and government will be strengthened. Likewise, institutional linkages will be fostered through Filipino professionals and experts abroad to induce more collaborations in research and development and capacity-building activities. The potential of OF remittances will be effectively harnessed and channeled into productive investments, through localization of the *BaLinkBayan* Portal and replication of the Overseas Filipino Remittances for Development³ (OFReD) project.

Strengthening engagement of OFs, families, and other stakeholders in governance

Mainstream migration into local development planning. The government will facilitate the inclusion of programs/projects for repatriated OFWs in the Rehabilitation and Recovery Plans of LGUs. Committees, subcommittees, or councils on IMD will be created in key regions to provide a proper venue to discuss migration issues at the local level. It is necessary to include migrant representatives in these committees to ensure that migrants' concerns are addressed and to harness their full potential in contributing to local development.

Increase overseas voter turnout. More strategic locations of overseas registration centers abroad will be explored. Massive information campaigns, especially through social media, to encourage OFs to register and vote will be also pursued.

Protecting the rights and improving the well-being of foreign nationals in the country

Establish clear policy direction as a migrant-receiving country. The swift passage of amendments to the Philippine Immigration Act of 1940, to enhance the control and regulation of the entry of foreign citizens into the Philippines is a crucial step towards improving immigration policy and management. While work permit issuance by different agencies was harmonized through Joint Memorandum Circular No. 001, s. 2019, the government will look into the eventual transition to a single provider of all work permits for foreign nationals. Moreover, in accordance with the GCM, the security and safety of foreign nationals in the Philippines will be ensured by providing them with basic services, protecting them against discrimination, and upholding due process of law in cases of litigation. Foremost, the government will uphold international treaties on the rights of migrants and guarantee that foreign nationals in the Philippines are not denied basic services on the basis of their status as migrants. The legal framework for the protection of asylum seekers, refugees, and stateless persons, including children, will be developed, including institutionalization of their access to social services.

³ The OF-RED project was launched by the United Nations Development Programme and the Western Union Foundation and implemented by the CFO.

Legislative Agenda

For the rest of the Plan period, the following legislative agenda will be pursued:

Table 21.2 Legislative Agenda to Protect the Rights, Promote the Welfare, and Expand Opportunities for Overseas Filipinos to Contribute to the Country’s Development

LEGISLATIVE AGENDA	RATIONALE
Subsector Outcome 1: OFs’ rights protected and well-being improved	
Magna Carta of Filipino Seafarers	This will provide the legislative framework on the implementation of the standards set by international conventions and agreements, such as the Maritime Labor Convention 2006 on the working and living conditions and occupational safety and health, among others, for seafarers.
Subsector Outcome 4: Rights protected and well-being improved for foreign nationals in the country	
Amendments to the Philippine Immigration Act of 1940	The proposed amendments aim to strengthen legal and institutional framework, border control at ports of entry, and regulation and registration of foreign nationals within the country.
Amendment to Articles 40, 41, and 42 of Presidential Decree No. 442 or the Labor Code of the Philippines	This will enhance the country’s labor market test, taking into account best practices in other countries.

List of Acronyms

4Ps	Pantawid Pamilyang Pilipino Program
5G	Fifth Generation Mobile Network
ABEMIS	Agricultural and Biosystems Engineering Management Information System
ABS	Access and Benefit Sharing
ADB	Asian Development Bank
ADR	Alternative Dispute Resolution
ADSDPP	Ancestral Domain Sustainable Development and Protection Plan
AEWs	Agriculture Extension Workers
AFF	Agriculture, Forestry, and Fisheries
AFMechERN	Agriculture and Fisheries Mechanization Engineering Resource Network
AFP	Armed Forces of the Philippines
AHP	Affordable Housing Program
AI	Artificial Intelligence
AMTEC	Agricultural Machinery Testing and Evaluation Center
AONCR	Areas Outside the National Capital Region
ARB	Agrarian Reform Beneficiary
ARMM	Autonomous Region in Muslim Mindanao
ARTA	Anti-Red Tape Authority
ASEAN	Association of Southeast Asian Nations
ASRH	Adolescent Sexual and Reproductive Health
ATC	Air Traffic Control
ATN	Assistance to Nationals
AVCF	Agriculture Value Chain Financing
AWD	Alternate Wetting and Drying
B2B	Business-to-Business
BAFE	Bureau of Agricultural and Fisheries Engineering
BALAI	Building Adequate, Livable, Affordable, and Inclusive Filipino Communities
BARMM	Bangsamoro Autonomous Region in Muslim Mindanao
BBB	Build, Build, Build
BCP	Business Continuity Plan
BDAF	Bangsamoro Development Assistance Fund

BDFE	Biodiversity-Friendly Enterprises
BDP	Bangsamoro Development Program
BE-LCP	Basic Education Learning Continuity Plan
BFAR	Bureau of Fisheries and Aquatic Resources
BFP	Bureau of Fire Protection
BHERT	Barangay Health Emergency Response Team
BHS	Barangay Health Station
BIMP-EAGA	Brunei Darussalam-Indonesia-Malaysia-Philippines East ASEAN Growth Area
BIR	Bureau of Internal Revenue
BIST	Business Innovation through S&T
BJMP	Bureau of Jail Management and Penology
BLA	Bilateral Labor Agreements
BMBE	Barangay Micro Business Enterprise
BNS	Barangay Nutrition Scholar
BOC	Bureau of Customs
BOD	Biochemical Oxygen Demand
BOI	Board of Investments
BOL	Bangsamoro Organic Law
BOQ	Bureau of Quarantine
BP2	Balik Probinsya, Bagong Pag-asa Program
BRT	Bus Rapid Transit
BSFI	Bangko Sentral ng Pilipinas Supervised Financial Institutions
BSL2	Biosafety Laboratory Level 2
BSP	Bangko Sentral ng Pilipinas
BSWM	Bureau of Soils and Water Management
BTA	Bangsamoro Transition Authority
BUCOR	Bureau of Corrections
CAAP	Civil Aviation Authority of the Philippines
CAB	Comprehensive Agreement on the Bangsamoro
CADT	Certificate of Ancestral Domain Title
CALABARZON	Cavite, Laguna, Batangas, Rizal, and Quezon (Region IV-A)
CALT	Certificate of Ancestral Land Title
CARP	Comprehensive Agrarian Reform Program

CBA	Cost-Benefit Analysis
CBA-CPLA	Cordillera Bodong Administration - Cordillera People's Liberation Army
CBFMA	Community-Based Forest Management Agreement
CBMS	Community-Based Monitoring System
CBP	Central Business Portal
CCAM	Climate Change Adaptation and Mitigation
CCC	Climate Change Commission
CCTV	Closed-Circuit Television
CDA	Cooperative Development Authority
CDC	Center for Disease Prevention and Control
CDP	Comprehensive Development Plan
CEMS	Continuous Emission Monitoring System
CFLC	Community Fish Landing Centers
CFO	Commission on Filipinos Overseas
CHED	Commission on Higher Education
CHR	Commission on Human Rights
CID	Clarificatory Implementing Document
CIO	Chief Information Officer
CIS	Collective Investment Scheme
CLUP	Comprehensive Land Use Plan
CMA	Compliance Monitoring Activities
CMEMP	Coastal and Marine Ecosystems Management Program
COA	Commission on Audit
COC	Code of Conduct
COC	Certificate of Conformity
COMELEC	Commission on Elections
CoP	Culture of Peace
CORSIA	Carbon Offsetting and Reduction Scheme for International Aviation
COVAX	COVID-19 Vaccines Global Access
COVID-19	Coronavirus Disease 2019
CPA	Citizen Participatory Audit
CPAB	Consumer Protection and Advocacy Bureau
CPI	Corruption Perceptions Index
CRADLE	Collaborative Research and Development to Leverage Philippine Economy

CREATE	Corporate Recovery and Tax Incentives for Enterprises
CRK	Clark International Airport
CRM	Coastal Resource Management
CRP	Comprehensive Resiliency Plan
CSA	Civil Service Academy
CSC	Civil Service Commission
CSE	Comprehensive Sexuality Education
CSF	Credit Surety Funds
CSO	Civil Society Organization
CSP	Competitive Selection Process
CSPP	Conflict-Sensitive and Peace-Promoting
DA	Department of Agriculture
DA-BFAR	Department of Agriculture - Bureau of Fisheries and Aquatic Resources
DA-BSWM	Department of Agriculture - Bureau of Soils and Water Management
DAP	Development Academy of the Philippines
DAR	Department of Agrarian Reform
DBCC	Development Budget Coordination Committee
DBM	Department of Budget and Management
DC	Department Circular
DCP	Design Center of the Philippines
DENR	Department of Environment and Natural Resources
DepEd	Department of Education
DevLive	Development Live
DFA	Department of Foreign Affairs
DFS	Digital Financial Services
DHSUD	Department of Human Settlements and Urban Development
DICT	Department of Information and Communications Technology
DILG	Department of the Interior and Local Government
DILG-BLGS	Department of the Interior and Local Government - Bureau of Local Government Supervision
DND	Department of National Defense
DO	Department Order
DO	Dissolved Oxygen
DOE	Department of Energy
DOF	Department of Finance

DOH	Department of Health
DOJ	Department of Justice
DOLE	Department of Labor and Employment
DOST	Department of Science and Technology
DOT	Department of Tourism
DOTr	Department of Transportation
DPWH	Department of Public Work and Highways
DPWH-Planning Service	Department of Public Works and Highways - Planning Service
DRR	Disaster Risk Reduction
DRRM	Disaster Risk Reduction and Management
DSWD	Department of Social Welfare and Development
DTI	Department of Trade and Industry
DU	Distribution Utility
DVT	Demographic Vulnerabilities Tool
DWR	Department of Water Resources
E&E	Electronic and Electrical
EAFM	Ecosystem Approach to Fisheries Management
EbA	Ecosystem-based Adaptation
eBPLS	electronic Business Permits and Licensing System
ECCD	Early Childhood Care and Development
E-CLIP	Enhanced Comprehensive Local Integration Program
ECQ	Enhanced Community Quarantine
EC	Electric Cooperatives
EDLP	Enterprise Development and Loan Program
EE&C	Energy Efficiency and Conservation
EEWIN	Eco-efficient Water Infrastructure
e-GDI	e-Government Development Index
EMB	Environmental Management Bureau
ENIPAS	Expanded National Integrated Protected Areas System
ENR	Environment and Natural Resources
EO	Executive Order
EODB	Ease of Doing Business
EODB-EGSD Act	Ease of Doing Business and Efficient Government Service Delivery Act of 2018

EOP	End of Plan
EPIRA	Electric Power Industry Reform Act
EPR	Extended Producers Responsibility
ERC	Energy Regulatory Commission
ERF	Enterprise Rehabilitation Fund
EU	European Union
EUFS	Environmental User Fee System
EVOSS	Energy Virtual One Stop Shop
E-Waste	Electronic Wastes
EWS	Early Warning System
Fablabs	Fabrication Laboratories
FCP	Financial Consumer Protection
FDCCP	Film Development Council of the Philippines
FDI	Foreign Direct Investment
FIA	Foreign Investments Act
FIC	Food Innovation Center
FIES	Family Income and Expenditure Survey
FINL	Foreign Investment Negative List
FIRe	Fourth Industrial Revolution
FishR	Municipal Fisherfolk Registry
FIST	Financial Institutions Strategic Transfer Act
FLEMMS	Functional Literacy, Education, and Mass Media Survey
FMA	Fisheries Management Area
FMI	Food Manufacturing Industry
FMP	Farm Mechanization Program
FMR	Farm-to-Market Road
FNRI	Food and Nutrition Research Institute
FP	Family Planning
FPA	Final Peace Agreement
FPIC	Free, Prior, and Informed Consent
FSCC	Financial Stability Coordination Council
FTA	Free Trade Agreement
FVE	Former Violent Extremist
FWA	Flexible Working Arrangement

FX	Foreign Exchange
G12	Grade 12
G2B	Government-to-Business
G7	Grade 7
GAP	Good Agricultural Practices
GAqP	Good Aquaculture Practices
GCG	Governance Commission for Government-Owned and Controlled Corporation
GCI	Global Competitiveness Index
GCM	Global Compact for Safe, Orderly, and Regular Migration
GCR	Greater Capital Region
GCTA	Good Conduct Time Allowance
GDP	Gross Domestic Product
GI	Geographic Indications
GIDA	Geographically Isolated and Disadvantaged Areas
GII	Global Innovation Index
GIS	Geographic Information System
GMP	Good Manufacturing Practice
GNI	Gross National Income
GOCC	Government-Owned and Controlled Corporation
GovNet	Government Network
GPH	Government of the Philippines
GPPB	Government Procurement Policy Board
GPRA	Government Procurement Act
GPS	Global Positioning System
GRDP	Gross Regional Domestic Product
GSIS	Government Service Insurance System
GSP	Generalized System of Preferences
GUIDE	Government Financial Institutions Unified Initiatives to Distressed Enterprises for Economic Recovery
GVA	Gross Value Added
GVC	Global Value Chain
HCC	Hard Coral Cover
HCI	Human Capital Index
HDI	Human Development Index

HEI	Higher Education Institution
HFEP	Health Facilities Enhancement Program
HIA	Health Impact Assessment
HIV	Human Immunodeficiency Virus
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome
HLURB	Housing and Land Use Regulatory Board
HNRDA	Harmonized National Research and Development Agenda
HOA	Homeowners Association
HPC	High Performance Computing
HR	Human Resource
HRD	Human Resource Development
HRH	Human Resources for Health
HTA	Health Technology Assessment
HTP	Heated Tobacco Product
HUC	Highly Urbanized City
HUDCC	Housing and Urban Development Coordinating Council
I&S	Industry and Services
i3S	Philippine Inclusive, Innovation, and Industrial Strategy
IA	Irrigator's Association
IAC	Inter-Agency Committee
IAC-CSAC	Inter-Agency Committee on Children in Situations of Armed Conflict
IACVAWC	Interagency Council on Violence Against Women and their Children
IATA	International Air Transport Association
IATCTP	Inter-Agency Technical Committee on Transport Planning
IATF	Inter-Agency Task Force
IB	Inclusive Business
ICAO	International Civil Aviation Organization
ICCMN	Inter-Cabinet Cluster Mechanism on Normalization
ICC	Indigenous Cultural Communities
ICM	Integrated Coastal Management
ICT	Information and Communications Technology
ID	Identification
IDP	Internally Displaced Peoples
IEC	Information, Education, and Communication

IEMP	Industrial Emission Management Program
IFMA	Integrated Forest Management Agreement
IFP	Infrastructure Flagship Project
IGRB	Intergovernmental Relations Body
IKSP	Indigenous Knowledge Systems and Practices
ILSA	International Large-Scale Assessment
ILT	Institute of Living Tradition
IMD	International Migration and Development
IMF	International Monetary Fund
INFRACOM	NEDA Board Committee on Infrastructure
INSARAG	International Search and Rescue Advisory Group
IoT	Internet of Things
IP	Indigenous People
IP	Intellectual Property
IPA	Investment Promotion Agencies
IPAF	Integrated Protected Area Fund
IPMR	Indigenous Peoples Mandatory Representation
IPOPHL	Intellectual Property Office of the Philippines
IPP	Independent Power Producer
IRA	Internal Revenue Allotment
IROAD	Integrated Road for Agriculture Development
IRR	Implementing Rules and Regulations
IT	Information Technology
IT-BPM	Information Technology and Business Process Management
ITSO	Innovation and Technology Support Office
IUUF	Illegal, Unreported, Unregulated Fishing
IWRM	Integrated Water Resource Management
JSCC	Justice Sector Coordinating Council
JV	Joint Venture
K	Kinder
KAYA	Kapital Access for Young Agripreneurs
KDC	Knowledge Development Center
LB	Live Birth
LCAC	Local Culture and Arts Council
LCCAP	Local Climate Change Action Plan

LDRRMP	Local Disaster Risk Reduction and Management Plan
LEES	Labor and Employment Education Services
LE	Large Enterprise
LFS	Labor Force Survey
LGA	Local Government Academy
LGU	Local Government Unit
LIIC	Local Investment and Incentives Code
LLDA	Laguna Lake Development Authority
LOE	Lines of Efforts
LPI	Legatum Prosperity Index
LRT	Light Rail Transit
LSP	Local Shelter Plan
LTFRB	Land Transportation Franchising and Regulatory Board
LTO	Land Transportation Office
LUC	Local University and College
M&E	Monitoring and Evaluation
MABUHAY	<i>Maginhawang Buhay</i> sa Bahay
MARINA	Maritime Industry Authority
MBPS	Megabits Per Second
MCIAA	Mactan-Cebu International Airport Authority
MIAA	Manila International Airport Authority
MIDP	Maritime Industry Development Plan
MILF	Moro National Liberation Front
MIMAROPA	Mindoro, Marinduque, Romblon, and Palawan (Region IV-B)
MISP	Minimum Initial Service Package
MLIN	Mindanao Logistics Infrastructure Network
MNLF	Moro Islamic Liberation Front
MOOC	More Open Online Course
MOU	Memorandum of Understanding
MP2	Modified Pag-IBIG 2 Program
MPA	Marine Protected Area
MRA	Mutual Recognition Arrangement
MRF	Materials Recovery Facilities
MRT	Metro Rail Transit
MSME	Micro, Small, and Medium Enterprise

NAIA	Ninoy Aquino International Airport
NaLUA	National Land Use Act
NAMRIA	National Mapping and Resource Information Authority
NAO	Nutrition Action Officer
NAP-PCVE	National Action Plan on Preventing and Countering Violent Extremism
NAP-WPS	National Action Plan on Women, Peace, and Security
NAP-YPS	National Action Plan on Youth, Peace, and Security
NAT	National Achievement Test
NBP	National Broadband Plan
NCA	Natural Capital Accounting
NCC	National Competitiveness Council
NCCA	National Commission for Culture and the Arts
NCCAG	National Color-Coded Agricultural Guide Map
NCD	Non-Communicable Disease
NCDA	National Council on Disability Affairs
NCIP	National Commission on Indigenous Peoples
NCP	National Competition Policy
NCR	National Capital Region
NC	Negosyo Center
NCSP	National Cybersecurity Plan
NDCG	Nilo De la Cruz Group
NDHS	National Demographic and Health Survey
NDRRMC	National Disaster Risk Reduction and Management Council
NEA	National Electrification Administration
NEDA	National Economic and Development Authority
NEE	Not in Education and Employment
NEET	Not in Education, Employment, or Training
NEHEMIA	National Effort for the Harmonization of Efficient Measures of Inter-related Agencies
NER	Net Enrolment Rate
NFA	National Food Authority
NFRDI	National Fisheries Research and Development Institute
NG	National Government
NGA	National Government Agency
NGCP	National Grid Corporation of the Philippines

NGI	National Governance Index
NGO	Non-Government Organization
NGP	National Greening Program
NHA	National Housing Authority
NHIP	National Health Insurance Program
NHMFC	National Home Mortgage Finance Corporation
NHRI	National Human Rights Institution
NHTS-PR	National Household Targeting System for Poverty Reduction
NIA	National Irrigation Administration
NIA	National Income Accounts
NIASD	National Innovation Agenda Strategy Document
NIC	National Innovation Council
NICER	Niche Centers in the Regions for R&D
NIMP	National Irrigation Master Plan
NIPAS	National Integrated Protected Area System
NIPAS-PA	National Integrated Protected Area System - Protected Area
NIPS	National Intellectual Property Strategy
NJIS	National Justice Information System
NLEX	North Luzon Expressway
NMIS	National Measurement Infrastructure System
NMVIMP	National Motor Vehicle Inspection and Maintenance Program
NNC	National Nutrition Council
NPC	National Power Corporation
NPC-SPUG	National Power Corporation - Small Power Utilities Group
NPPFP	National Program on Population and Family Planning
NQI	National Quality Infrastructure
NREP	National Renewable Energy Program
NRPF	National Resettlement Policy Framework
NSS	National Spatial Strategy
NSSMP	National Sewerage and Septage Management Program
NSWMC	National Solid Waste Management Commission
NTESD	National Technical Education and Skills Development
NTF-ELCAC	National Task Force to End Local Communist Armed Conflict
NTJRB	National Transitional Justice and Reconciliation Commission for the Bangsamoro

NTP	National Transport Policy
NUA	New Urban Agenda
NUDHF	National Urban Development and Housing Framework
NWPC	National Wages and Productivity Commission
NWRB	National Water Resources Board
O&M	Operations and Maintenance
OCD	Office of Civil Defense
OF	Overseas Filipino
OFC	Office for Competition (under the Department of Justice)
OfReD	Overseas Filipino Remittances for Development
OFW	Overseas Filipino Worker
OIC	Organization of Islamic Cooperation
OneLab	One-stop Laboratory Services for Global Competitiveness
OPLAN	Operational Plan
OPRT	Overseas Preparedness Response Team
OSH	Occupational Safety and Health
OTS	Office for Transportation Security
OWWA	Overseas Workers Welfare Administration
P3	<i>Pondo sa Pagbabago at Pag-Asenso</i> Program
PADS	Philippine Anti-illegal Drugs Strategy
PAMANA	Payapa at Masaganang Pamayanan
PAO	Public Attorney's Office
PAOS	Post-Arrival Orientation Seminar
PAP4SCP	Philippine Action Plan for Sustainable Consumption and Production
PASA	Protected Area Suitability Assessment
PBB	Performance-Based bonus
PBD	Philippine Business Databank
PCA	Philippine Coconut Authority
PCA	Philippine Competition Act
PCC	Philippine Competition Commission
PCG	Philippine Coast Guard
PCIC	Philippine Crop Insurance Corporation
PCSF	Philippine Cultural Statistics Framework
PDEA	Philippine Drug Enforcement Agency
PDL	Person Deprived of Liberty

PDM	Price Determination Methodology
PDOS	Pre-Departure Orientation Seminar
PDP	Philippine Development Plan
PeGIF	Philippine e-Government Interoperability Framework
PEIS	PESO Employment Information System
PEP	Philippine Energy Plan
PESO	Public Employment Service Office
PEZA	Philippine Economic Zone Authority
PHILGUARANTEE	Philippine Guarantee Corporation
PGRABS	Philippine Genetic Resources Access and Benefit-Sharing
PHE	Population-Health-Environment
PHEDPP	Philippine Halal Export Development and Promotion Program
PHFDP	Philippine Health Facilities Development Plan
PhilHealth	Philippine Health Insurance Corporation
PhilSA	Philippine Space Agency
PhilSys	Philippine Identification System
PIDS	Philippine Institute for Development Studies
PIPP	Philippine Investment Promotion Plan
PiTaKa	<i>Pinansyal na Talino at Kaalaman</i>
PLEA	Production Loan Easy Access
PLHIV	People Living with HIV
PM 10	Particulate matter measuring 10 micrometers in diameter or smaller
PM 2.5	Particulate matter measuring 2.5 micrometers in diameter or smaller
PNP	Philippine National Police
POC	Persons of Concern
POEA	Philippine Overseas Employment Administration
POPCOM	Commission on Population and Development
PPA	Philippine Ports Authority
PPAN	Philippine Plan of Action for Nutrition
PPA	Program, Project, and Activity
PPE	Personal Protective Equipment
PPP	Public-Private Partnership
PPSA	Personal Property Security Act
ppt	Percentage Point
QQF	Philippine Qualifications Framework

PRC	Professional Regulation Commission
PRISM	Philippine Rice Information System
PSA	Philippine Statistics Authority
PSA	Public Service Act
PSALM	Power Sector Assets and Liabilities Management
PSC	Plan Steering Committee
PSC	Philippine Sports Commission
PSDP	Philippine Startup Development Program
PSN	PhilSys Number
PUV	Public Utility Vehicle
PV	PhotoVoltaic
PWSSMP	Philippine Water Supply and Sanitation Master Plan
QR	Quantitative Restriction
QTP	Qualified Third Party
R&D	Research and Development
RA	Republic Act
RBE	Registered Business Entities
RBPMS	Results-Based Performance Management System
RCEF	Rice Competitiveness Enhancement Fund
RCM	Rice Crop Manager
RCOA	Retail Competition and Open Access
RCS	Report Card Survey
RCSP	Retooled Community Support Program
RD&E	Research, Development, and Extension
RD&I	Research, Development, and Innovation
RDI	Research and Development Institutions
RDLead	R&D Leadership
RE	Renewable Energy
REAP	Resettlement Emergency Assistance Program
RFINL	Regular Foreign Investment Negative List
RHU	Rural Health Unit
RIA	Regulatory Impact Assessment
RIIC	Regional Inclusive Innovation Center
RIPPLES Plus	Regional Interactive Platform for the Philippine Exports Plus
RITM	Research Institute for Tropical Medicine

RLTA	Rapid Land Tenure Appraisal
RM	Results Matrix
RM	Results Matrice
ROF	Returning OFs
RORO	Roll-On-Roll-Off
ROTC	Reserved Officers' Training Corps
ROW	Right-of-Way
RPMP-RPA-ABB	<i>Rebolusyonaryong Partido ng Manggagawa-Pilipinas</i> -Revolutionary Proletarian Army-Alex Boncayao Brigade
RPRH	Responsible Parenthood and Reproductive Health
RSBSA	Registry System for the Basic Sectors in Agriculture
RSE	Researcher, Scientist, and Engineer
RTLA	Retail Trade Liberalization Act
RTGS	Real-Time Gross Settlement
RTL	Rice Tariffication Law (RA11203)
RT-PCR	Reverse Transcription Polymerase Chain Reaction
RTWPB	Regional Tripartite Wages and Productivity Board
S&T	Science and Technology
S4CP	Science for Change Program
SAP	Social Amelioration Program
SBCorp	Small Business Corporation
SBFP	School-Based Feeding Program
SBSR	Shipbuilding and Ship Repair
SC	Supreme Court
SCAn	Supply Chain Analytics Dashboard
SCF	Supply Chain Financing
SCP	Sustainable Consumption and Production
SCS	South China Sea
SCSP	Sub-Committee on Social Protection
SCTEX	Subic-Clark-Tarlac Expressway
SDC	Social Development Committee
SDG	Sustainable Development Goal
SEC	Securities and Exchange Commission
SETUP	Small Enterprise Technology Upgrading Program
SFF	Small Farmer and Fisherfolk

SFP	Supplementary Feeding Program
SGLG	Seal of Good Local Governance
SIA	Survey on Innovation Activities
SIP	Sustainability Incentive Program
SIPP	Strategic Investment Priority Plan
SIRI	Smart Industry Readiness Index
SLF	Sanitary Landfill
SLM	Sustainable Land Management
SLT	School of Living Tradition
SME	Small and Medium Enterprise
SP	Social Protection
SPS	Sanitary and Phytosanitary Measures
SSS	Social Security System
STEAM	Science, Technology, Engineering, Arts, and Mathematics
STEM	Science, Technology, Engineering, and Mathematics
STI	Science, Technology, and Innovation
STP	Selected Training Program
STW	School-To-Work
sTWG	Sub-Technical Working Group
SUC	State University and College
SURE	Survival and Recovery Assistance
SWM	Solid Waste Management
TB	Tuberculosis
TBI	Technology Business Incubators
TBT	Technical Barriers to Trade
TDP	Transmission Development Plan
TESDA	Technical Education and Skills Development Authority
TFBL	Task Force <i>Balik-Loob</i>
TPG	Tabara-Paduan Group
TRAIN	Tax Reform for Acceleration and Inclusion
TRP	Tripartite Review Process
TSD	Treatment, Storage, and Disposal
TSS	Total Suspended Solids
TTA	Technology Transfer Agreement
TV	Television

TVET	Technical and Vocational Education and Training
TVI	Technical and Vocational Institution
TWG-AFP	Technical Working Group on Anticipatory and Forward Planning
UACS	Unified Accounts Code Structure
UAQTE	Universal Access to Quality Tertiary Education
UAV	Unmanned Aerial Vehicle
UDHA	Urban Development and Housing Act
UHC	Universal Health Care
UHC	Urban Health Center
UI	Unemployment Insurance
UN	United Nations
UNCLOS	United Nations Convention on the Law of the Sea
UNDESA	United Nations Department of Economic and Social Affairs
UNESCO	United Nations Educational, Scientific, and Cultural Organisation
UniFAST	Unified Financial Assistance System for Tertiary Education
UNSCR	United Nations Security Council Resolution
UNWTO	United Nations World Tourism Organization
UP-NIH	University of the Philippines - National Institutes of Health
VAT	Value Added Tax
VAWC	Violence Against Women and their Children
WB	World Bank
WB-IFC	World Bank - International Finance Corporation
WD	Water District
WEF	World Economic Forum
WESM	Wholesale Electricity Spot Market
WGI	Worldwide Governance Indicator
WHO	World Health Organization
WIPO	World Intellectual Property Organization
WJP-ROL	World Justice Project - Rule of Law
WPS	West Philippine Sea
WQMA	Water Quality Management Area
WRC	Water Regulatory Commission
WSS	Water Supply and Sanitation
WTE	Waste-To-Energy
WTO	World Trade Organization

Glossary

21 st century skills	Generally used to refer to certain competencies such as collaboration, digital literacy, problem-solving, civic literacy, global awareness, and cross-cultural skills; gender sensitivity, critical and inventive thinking, communication, collaboration, and information skills, risk-taking, entrepreneurial skills, passion for learning and discovery, and resiliency.
5G Networks	Fifth generation of wireless networks that entails higher wireless network speeds, lower latency, and higher density of devices connected per square kilometer (sq. km.).
Absorptive capacity	A measure of an agency's ability to maximize the use of financial resources made available to it.
Abuse of dominance	Abuse of dominance occurs when a dominant firm in a market or group of firms engages in conduct that is intended to eliminate or discipline a competitor or to deter future entry by new competitors, leading to substantially lessened competition. (Competition Bureau of Canada, 2018) Abuses of dominance prohibited by the Philippine Competition Act (PCA), include predatory pricing, exploitative behavior towards consumers, customers, and/or competitors, discriminatory behavior, and limiting production, markets or technical development to the detriment of consumers.
Access and benefit sharing	Refers to the way in which genetic resources may be accessed, and how the benefits that result from their use are shared between the people or countries using the resources (users) and the people or countries that provide them (providers). (United Nation [UN] Convention on Biological Diversity)
Access points	In the Core Set of Financial Inclusion Indicators developed by the Alliance for Financial Inclusion (AFI), access points are defined as regulated entities where both cash-in and cash-out transactions can be performed. Other access points include non-stock savings and loan associations (NSSLA), cooperatives offering financial services, microfinance non-government organizations (NGOs), pawnshops, money service business (MSB), lending companies, other non-banking financial institutions (NBFIs), e-money agents, and cash agents. (Bangko Sentral ng Pilipinas [BSP], 2020)

Accreditation	A third-party attestation related to a conformity assessment body conveying a formal demonstration of its competence to carry out specific conformity assessment tasks. It provides a uniform and technical policy and the conditions for mutual recognition at the international level. It is integral in promoting reliability and confidence in conformity assessment and metrology results towards improving the quality, competitiveness, and international acceptance of Philippine goods and services.
Active members	In general, overseas Filipino workers (OFW) who have paid the required membership fee within a required time to qualify for full eligibility of benefits of Overseas Workers Welfare Administration (OWWA)/ Home Development Mutual Fund (Pag-IBIG)/ Social Security System (SSS)/ Philippine Health Insurance Corporation (PhilHealth). (National Economic and Development Authority [NEDA], 2019)
Active transport	Refers to physical activity undertaken as a means of transport. (Department of Health [DOH], Department of Transportation [DOTr], Department of Interior and Local Government [DILG], Department of Public Works and Highways [DPWH] Joint Administrative Order No. 2020-001 Guidelines on the Proper Use and Promotion of Active Transport During and After the COVID-19 Pandemic)
Adaptation	Adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities. (Intergovernmental Panel on Climate Change [IPCC], 2001)
Additive manufacturing	Also known as three-dimensional (3D) printing; entails different techniques that build new objects by adding materials in layers of precise geometric shapes through a computer-aided design software or 3D object scanners.
Adolescent birth rate	Also known as “age-specific fertility rate for women aged 15-19” or the number of births to women of a given age group (15-19) per 1,000 women in that age group. (Philippine Statistics Authority [PSA], 2003)
Adult learning	Education specifically targeted at individuals who are regarded as adults by their society to improve their technical or professional qualifications, further develop their abilities, enrich their knowledge with the purpose to complete a level of formal education, or to acquire, refresh, or update their knowledge, skills and competencies in a particular field. This also includes what may be referred to as ‘continuing education,’ ‘recurrent education,’ or ‘second chance education.’ (UNESCO Institute for Statistics [UIS] 2011 as cited in PSA, 2017)

Advanced economies	Australia, Austria, Belgium, Canada, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hong Kong SAR, Iceland, Ireland, Israel, Italy, Japan, Korea, Latvia, Lithuania, Luxembourg, Macao SAR, Malta, Netherlands, New Zealand, Norway, Portugal, Puerto Rico, San Marino, Singapore, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Taiwan Province of China, United Kingdom, and United States.
Aeronautical lighting system	Refers to the entire set of ground-installed luminaires and related structures meant to be used as visual aids by aircraft pilots. (Serra, F. B. [2006]. Aeronautical Ground Lighting. <i>International Airport Review</i> , 10[1].)
Aeroponics	A way of planting in which plants are suspended on the air and grow in a humid environment without soil. (Food and Agriculture Organization [FAO])
Agglomeration	A cluster of a highly-integrated group of cities/municipalities benefitting from localization and urbanization where producers of a wide range of commodities or services are near or close to each other (World Bank [WB], 2009; Yu & Fang, 2017)
Agrarian reform	The redistribution of lands, regardless of crops or fruits produced, to farmers and regular farm workers who are landless, irrespective of tenurial arrangement, to include the totality of factors and support services designed to lift the economic status of the beneficiaries and all other arrangements alternative to the physical redistribution of lands, such as production or profit-sharing, labor administration, and the distribution of shares of stock, which will allow beneficiaries to receive a just share of the fruits of the lands they work. (Comprehensive Agrarian Reform Law [Republic Act (RA) 6657], 1988)
Agrarian reform beneficiaries	Farmers who were granted lands under Presidential Decree (PD) No. 27, the Comprehensive Agrarian Reform Law, and the “Comprehensive Agrarian Reform Extension with Reforms” (RA 9700) and regular farm workers who are landless, irrespective of tenurial arrangement, who benefited from the redistribution of lands, regardless of crops or fruits produced, to include the totality of factors and support services designed to lift the economic status of the beneficiaries and all other alternative arrangements to the physical distribution of lands, such as production or profit-sharing, labor administration, and the distribution of shares of stock which will allow beneficiaries to receive a just share of the fruits of the lands they work. (Agri-Agra Reform Credit Act [RA 1000], 2009)
Agrarian reform community	A community composed and managed by agrarian reform beneficiaries (ARBs) who are willing to be organized and to undertake the integrated development of an area and/or their organizations or cooperatives. (Comprehensive Agrarian Reform Program Extension with Reforms [RA 9700], 2009)

Agri Agra Law	It repealed Presidential Decree 717, retains the mandatory credit allocation in that 25 percent of the banks' total loanable funds shall be set aside for agriculture and fisheries, of which at least 10 percent shall be made available for agrarian reform beneficiaries. (RA 10000, 2009)
Agribusiness	The sum of all operations involved in the manufacture and distribution of farm supplies; production activities on the farm; and the storage, processing and distribution of farm commodities and items made from them. (Department of Agrarian Reform [DAR] Administrative Order [AO] 5, s. 2009)
Agricultural and fisheries mechanization	The development, adoption, assembly, manufacture and application of appropriate, location specific and cost-effective agricultural and fisheries machinery using human, animal, mechanical, electrical, renewable, and other nonconventional sources of energy for agricultural production and postharvest/postproduction operations consistent with agronomic conditions and for efficient and economic farm and fishery management towards modernization of agriculture and fisheries. (Agricultural and Fisheries Mechanization Law [RA 10601], 2013)
Agricultural lands	Lands devoted to or suitable for the cultivation of the soil, planting of crops, growing of trees, raising of livestock, poultry, fish or aquaculture production, including the harvesting of such farm products, and other farm activities and practices performed in conjunction with such farming operations by persons whether natural or juridical and not classified by the law as mineral land, forest land, residential land, commercial land, or industrial land. (Agriculture and Fisheries Modernization Act [RA 8435], 1997)
Agricultural value chain finance	Refers to the use of a value chain and the way in which it supports participants by tailoring services and products to one or more points in a value chain in order to reduce the risk and cost of financing, and increase the efficiency of the value chain as a whole. Value chain financing (VCF) can help meet the growing need for agricultural finance and investment in response to consumer demand for more processed or value-added products.
AgriDoc app	An Android smartphone and tablet farm management tool developed by PhilRice, which is intended for rice farmers, researchers, and extension workers. It has features that can allow users to keep records on expenses and farm activities, view farm area through Google Maps, and plan tasks and get reminders of users' activities in the calendar view. (Philippine Rice Research Institute [PRRI])
Agripreneurship/ Agripreneurs	A profitable marriage of agriculture and entrepreneurship. The term Agripreneurship is synonymous with entrepreneurship in agriculture and refers to agribusiness establishments in agriculture and allied sectors. An agripreneur is someone who undertakes a variety of activities in the agriculture sector in order to be an entrepreneur.

Agroforestry	A strategy for sustainable management of land which increases their overall productivity by properly combining agricultural crops and/or livestock with forest crops simultaneously or sequentially over time through the application of management practices which are compatible with the local climate, topography, slope, soil, as well as the cultural patterns or customary laws of the local communities. (Philippine Official Reference for Forest-Related Terms and Definitions and the Proposed Sustainable Forest Management Act)
Agro-industrial area	An area planned and designed to have support facilities and services required for processing and agro-based manufacturing activities, utilizing local agricultural and marine products as basic raw materials (e.g., post-harvest treatment, packaging, printing, cold storage, blast freezing, by-product and waste management, and other facilities and services). Similar agricultural products may be brought into the zone to be stored, sold, exhibited, broken up, repacked, distributed, sorted, graded, cleaned, mixed with foreign or domestic merchandise, or otherwise manipulated or manufactured and exported.
Aids to navigation	Any sort of marker placed along coasts and navigable waters as guides to mark safe water and to assist mariners in determining their position in relation to land and hidden dangers. Common types of such aids include lighthouses, buoys, fog signals, and day beacons. (Faculty of Maritime Studies, University of Reijika)
Air Passengers Bill of Rights	This refers to the Department of Transportation and Communications (DOTC) - Department of Trade and Industry (DTI) Joint Administrative Order (JAO) 1, s. 2012, which aims to infuse a certain measure of balance, fairness and reasonableness between the precarious position of a passenger vis-à-vis the vast resources at the disposal of the air carrier, especially in a liberalized and highly competitive aviation environment, which if unfettered, can lead to unsound business policies and practices of air carriers that are prejudicial to the rights and interests of the passengers.
Air traffic control	The process or system by which the movements of aircraft are monitored and directed by ground personnel communicating with pilots by radio.
Airsheds	Areas with similar climate, meteorology and topology which affect the interchange and diffusion of pollutants in the atmosphere, or areas which share common interest or face similar development programs, prospects, or problems. (RA 8749, 1999)
Airspace management	Process by which airspace options are selected and applied to meet the needs of the airspace users with the objective of achieving the most efficient use of the airspace based on actual needs and, when possible, avoiding permanent airspace segregation.

Alternate wetting and drying	A water-saving technology that farmers can apply to reduce their irrigation water consumption in rice fields without decreasing its yield. The field gets alternately flooded and non-flooded by applying irrigation water a few days after the disappearance of the ponded water. The number of days of non-flooded soil between irrigations can vary from one to more than 10 days depending on soil type, weather, and crop growth stage. (International Rice Research Institute [IRRI])
Alternative dispute resolution	Any process or procedure used to resolve a dispute or controversy, other than by adjudication of a presiding judge of a court or an officer of a government agency, in which a neutral third party participates to assist in the resolution of issues, which includes arbitration, mediation, conciliation, early neutral evaluation, mini-trial, or any combination thereof.
<i>AmBisyon Natin</i> 2040	The collective long-term vision and aspirations of the Filipino people for a <i>matatag, maginhawa, at panatag na buhay para sa lahat</i> (strongly-rooted, comfortable, and secure life for all).
Amendment of the Cooperative Development Authority Charter	The Amendment of the Cooperative Development Authority (CDA) Charter (RA 11364) provided the CDA greater capacity to fulfill its developmental functions, which allows them to build capacity of members of cooperatives, and coordinate with local government units (LGUs) and implementing agencies in the formulation, adoption, and implementation of cooperative development plans, programs, and policies.
Ancestral domains	All areas generally belonging to indigenous cultural communities/indigenous peoples (ICCs/IPs) comprising lands, inland waters, coastal areas, and natural resources therein, held under a claim of ownership, occupied or possessed by ICCs/IPs, themselves or through their ancestors, communally or individually, continuously to the present except when interrupted by war, force majeure or displacements by force, deceit, stealth, or as a consequence of government projects or any other voluntary dealings entered into by government and private individuals, corporations, and which are necessary to ensure their economic, social, and cultural welfare. (Philippine Development Plan [PDP] 2011-2016; RA 8371, 1997)

Ancestral lands	Land occupied, possessed and utilized by individuals, families and clans who are members of the ICCs/IPs since time immemorial, by themselves or through their predecessors-in-interest, under claims of individual or traditional group ownership, continuously, to the present except when interrupted by war, force majeure or displacement by force, deceit, stealth, or as a consequence of government projects and other voluntary dealings entered into by the government and private individuals/corporations, including, but not limited to, residential lots, rice terraces or paddies, private forests, swidden farms, and tree lots. (RA 8371, 1997)
Angel investors	Individuals who offer promising startup companies funding in exchange for a piece of the business, usually in the form of equity or royalties.
Anti-competitive agreements	Agreements that substantially prevent, restrict, or lessen competition. These include horizontal agreements that are prohibited per se by the PCA and have the object or effect of substantially preventing, restricting, or lessening competition.
Anti-competitive merger and acquisition	Refers to those that create companies with dominant market power that could substantially lessen competition or significantly impede effective competition in the relevant market.
Anti-microbial resistance	When bacteria, viruses, fungi, and parasites evolve over time and do not react to medicines. This renders medicines ineffective, and lead to more persistent infections and higher risk of contagion.
Apprenticeship	An enterprise-based training undertaken within employment, involving a contract between a trainee and an enterprise on an approved enterprise-based training occupation. (Technical Education and Skills Development Authority [TESDA] Law [RA 7796])
Aquaculture	Fishery operations involving all forms of raising and culturing fish and other fishery species in fresh, brackish, and marine water areas. (PSA)
Aquaponics	Cultivation of plants and aquatic animals in a recirculating environment. (FAO)
Aquifer recharge	Process to replenish water in aquifers which are layers of water-bearing rock located underground that transmit water in sufficient quantity to supply pumping wells or natural springs. (US Environmental Protection Agency; RA 9275, 2004)
Artificial intelligence	Commonly called artificial intelligence (AI) or machine intelligence, it is the programmed reasoning and thinking skills applied to machines to mimic human or animal intelligence.

ASEAN Single Window	A regional trade facilitation initiative that connects and integrates National Single Window (NSW) systems of all ASEAN member states to expedite cargo clearance and promote ASEAN economic integration by enabling the electronic exchange of border trade-related documents among ASEAN member states.
ASEAN-5	Indonesia, Malaysia, the Philippines, Thailand, and Vietnam.
Asylum seeker	An individual who is seeking international protection. In countries with individualized procedures, an asylum seeker is someone whose claim has not yet been finally decided on by the country in which he or she has submitted it. Not every asylum seeker will ultimately be recognized as a refugee, but every recognized refugee is initially an asylum seeker. (International Organization for Migration [IOM])
Backward linkages	Indicates an interdependency (interconnectedness) of a particular industry with the “upstream” sectors from which it purchases its intermediate inputs directly and/or indirectly.
Backyard poultry/livestock raiser	Any farm or household raising at least one head of animal or bird and does not qualify as commercial farm. (PSA)
<i>Balay Silangan</i>	A harm reduction program initiated by the Philippine Drug Enforcement Agency (PDEA). This is reformative and rehabilitative in nature intended for non-drug users who voluntarily surrendered or availed of plea bargaining program. It provides general interventions, like continuing education and health awareness, and psychological/spiritual/physical activities, such as counseling, moral recovery, values formation, personal and life skills. Reformers are also taught livelihood and skills training programs.
<i>Balik Scientist Program</i>	A program that encourages highly-trained overseas Filipino (OFs) scientists and technologists, experts, and professionals to return to the Philippines and share their expertise for the acceleration of the scientific, agro-industrial, and economic development of the country.
Barangay micro business enterprise	Refers to any business entity or enterprise engaged in the production, processing, or manufacturing of products or commodities, including agro-processing, trading and services, whose total assets including those arising from loans but exclusive of the land on which the particular business entity’s office, plant, and equipment are situated, shall not be more than PHP3 million.
Basic deposit account	Refers to an interest or non-interest bearing account designed to promote financial inclusion. The key features of a basic deposit account are listed in BSP Circular 992 dated February 01, 2018.

Basic education	The education intended to meet learning needs in order to set the foundation for subsequent learning. It covers six years of primary education, four years of Junior High School, and two years of Senior High School. It also includes alternative learning system for out-of-school youth and adult learners and includes education for those with special needs. (RA 10533, 2013)
Basic Education Facilities Fund	An annual budget of the Department of Education (DepEd) for its school building program, which covers the improvement and maintenance of school facilities. It is utilized for the provision of classroom and workshop buildings, replacement of old dilapidated buildings, provision of furniture, repair and rehabilitation of classrooms, including heritage buildings, as well as water and sanitation facilities, and electrification. (DepEd Order 35, s. 2017, Revised Guidelines on the Implementation of the Basic Education Facilities Fund)
Basic sanitation	Refers to flush toilet (either owned or shared) and closed pit facilities.
<i>Bayanihan</i>	The Filipino spirit of civic unity and cooperation.
Big data analytics	Refers to digital data sets that are so large (either in terms of scale, i.e., “volume”, or streams across time, i.e., “velocity”) or complex (in terms of variety). This data deluge is a by-product or “exhaust” from making use of electronic devices (smart phones, tablets, laptops, biomedical equipment), social media, search engines, as well as sensors and tracking devices (including climate sensors and GPS). Making use of “Big Data” involves descriptive analytics (e.g., getting customer profiles and behavior from social media and customer transaction databases), predictive analytics (i.e., forecasting future events) and even prescriptive analytics (using simulation and optimization methods) that extract value from digital data.
BIMP-EAGA Transit Transport Route	Designated corridors as part of the ASEAN Framework Agreement on Facilitation of Goods in Transit, signed at Bangkok in Thailand on February 8, 2007. Specific routes will be determined and agreed upon by the Parties to facilitate transit of goods and means of transport across the territory of one or more participating parties, when the passage across such territory or territories, with or without transshipment, warehousing, breaking bulk, or change in the mode of transport, is only a portion of a complete journey beginning and terminating beyond the frontier of one or more participating parties across whose territory the traffic passes.
Biochemical oxygen demand	A measure of approximate quantity of dissolved oxygen that will be required by bacteria to stabilize organic matter in wastewater or surface water. (Department of Environment and Natural Resources [DENR] AO 35, s. 1990)

Biodiversity	The variability among living organisms from all sources including, inter alia, terrestrial, marine, and other aquatic ecosystems and the ecological complexes of which they are part. This includes diversity within species, between species and of ecosystems. (UN Convention on Biological Diversity [CBD])
Biodiversity-friendly enterprises	Economic activities and practices of micro, small, and medium enterprises (MSME), that promote the sustainable use of biological resources, create wealth and value, and open opportunities for the equitable sharing of benefits among stakeholders. (DENR - Biodiversity Management Bureau [BMB] Technical Bulletin 2017-01)
Biofuel	Bioethanol and biodiesel and other fuels made from biomass and primarily used for motive, thermal, and power generation, with quality specifications in accordance with the Philippine National Standards.
Bioprospecting	The research, collection, and utilization of biological and genetic resources for purposes of applying the knowledge derived therefrom solely for commercial purposes. (RA 9147, 2001)
Biotechnology	Any technological application that uses biological systems, living organisms, or derivatives thereof, to make or modify. (UNCBD)
Blended finance	The strategic use of development finance for the mobilisation of additional finance towards sustainable development in developing countries. It attracts commercial capital towards development-oriented projects, while providing financial returns to investors.
Blended learning	Refers to a learning delivery that combines face-to-face with any or a mix of online distance learning, modular distance learning, and TV/radio-based instruction. Blended learning will enable the schools to limit face-to-face learning, ensure social distancing, and decrease the volume of people outside the home at any given time. (DepEd, 2020)
Blockchain technology	Network of existing technologies that use distributed ledger technology to store information verified by cryptography among a group of users. The system ensures secure trust and direct transfer of value and data between parties.
Breakwater	A structure constructed for the purpose of forming an artificial harbour with a basin so protected from the effect of waves as to provide safe berthing for fishing vessels. There are many different types of breakwaters; natural rock and concrete, or a combination of the two, are the materials which form 95 percent or more of all the breakwaters constructed.
Brexit	United Kingdom's (UK) formal exit from the European Union on January 31, 2020.

Broadband	The International Telecommunication Union (ITU) defines broadband as an always-on and high-speed access service that provides connection to the internet and other information services. The broadband is often defined in terms of a threshold minimum capacity however, the broadband service requirements change with the fast pace of technological advancements, hence, should cope with the needs of the end-users. The National Telecommunications Commission (NTC), through its Memorandum Circular (MC) 07-08-2015 defined entry-level broadband as a data connection with speed of at least 256 kilobits per second (kbps).
Budget and Treasury Management System	A common, modern, integrated, accurate, reliable, and secure information system for the public financial management operations of the Government of the Philippines (GOP). (Budget and Treasury Management System [BTMS])
Bus rapid transit	A high-quality bus-based transit system that delivers fast, comfortable, and cost-effective services at metro-level capacities. It does this through the provision of dedicated lanes, with busways and iconic stations typically aligned to the center of the road, off-board fare collection, and fast and frequent operations.
Business continuity plan	A document that outlines how a business will continue operating during an unplanned disruption in service.
Business Innovation through Science and Technology for Industry	This aims to provide financial assistance to Filipino private companies for the acquisition of strategic and relevant technologies so they can undertake their research and development (R&D). The financial assistance, which may only be used to purchase high-tech equipment or to secure technology licensing and/or patent rights, will be refunded to the Department of Science and Technology (DOST) at zero percent interest. (Science for Change Program)
Capital conservation buffer	Introduced to ensure that banks have an additional layer of usable capital that can be drawn down when losses are incurred. The buffer was implemented in full as of 2019 and is set at 2.5 percent of total risk-weighted assets. It must be met with Common Equity Tier 1 (CET1) capital only, and it is established above the regulatory minimum capital requirement. (Bank for International Settlements, 2019)
Capital outlay	Appropriations for the purchase of goods and services, the benefits of which extend beyond the fiscal year and which add to the assets of government-owned and controlled corporations (GOCCs), including investments in the capital stock of GOCCs and their subsidiaries.

Carbon Offsetting and Reduction Scheme for International Aviation	A global Market Based Measure (MBM) scheme to address any annual increase in total carbon dioxide (CO ₂) emissions from international civil aviation (i.e. civil aviation flights that depart in one country and arrive in a different country) above the 2020 levels, taking into account special circumstances and respective capabilities. (International Civil Aviation Organization [ICAO])
Cartel	An organization formed by competitors in a specific industry to enable them to set prices and control levels of production.
Cash-based budgeting system	Annual appropriations that limit incurring obligations and disbursing payments for goods delivered and services rendered, inspected, and accepted within the current fiscal year. (Department of Budget and Mangement [DBM], 2020)
Cash-lite economy	A transition from a cash-heavy economy where there is less cash and less coins and a widespread adoption of electronic payments.
Caves	Any naturally-occurring void, cavity, recess, or system of interconnected passages beneath the surface of the earth or within a cliff or ledge and which is large enough to permit an individual to enter, whether or not the entrance is located either in private and public land, is naturally formed or man-made. (RA 9072, 2001)
Certificate of Land Ownership Award	A document evidencing ownership of the land granted or awarded to the beneficiary by the Department of Agrarian Reform (DAR), and contains the restriction and conditions provided for in RA 6657 and other applicable laws. (DAR AO 3, s. 1990)
Certificate of origin	A trade document that indicates origin of a good or commodity often used to support claims for preferential tariff.
Certification rate	The percentage of examinees who passed the national competency assessment for or within a given period.
Citizen Participatory Audit	A priority program of the Commission on Audit (COA) founded on the premise that public accountability can prosper only with a vigilant and involved citizenry (COA, 2014). This is ensured through conducting audits with citizens as members of the COA audit teams.
Citizen Satisfaction Index System	A set of data tools designed to collect and generate relevant citizens' feedback on local governments' service delivery performance and on the citizens' general satisfaction. The Citizen Satisfaction Index System (CSIS) conceptualizes the citizen as the center of local government performance. (CSIS)

Climate change	A change in the state of the climate that can be identified by changes in the mean and/or the variability of its properties and that persists for an extended period, typically decades or longer, whether due to natural variability or as a result of human activity. (RA 9729, 2009)
Climate change adaptation	The adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities (RA 9729, 2009).
Closed season	The period during which the taking of specified fishery species by a specified fishing gear is prohibited in a specified area or areas in Philippine waters. (Fisheries Code [RA 8550], 1998)
Cloud computing	Refers to both the applications delivered as services over the internet and the hardware and systems software in the datacenters that provide those services. The services themselves have long been referred to as “software as a service” (SaaS). The datacenter hardware and software is what is called a cloud.
Collaborative R&D to Leverage the Philippine Economy	Aims to enable technological advancement and innovation of local companies and to support the growth of the Philippine Innovation ecosystem. Through the program, the academe and/or research and development institutions (RDI) in partnership with a Filipino company, undertakes research and development to improve the company’s products, processes, and services to become more competitive in their respective industries. Beneficiary-companies under this program must provide at least 20 percent counterpart funding and commit to adopt the technology that will be developed. This way, research outputs from the academe are directly translated commercially to the market. (Science for Change Program)
Collective investment schemes	An arrangement whereby funds are solicited from the investing public for the purpose of investing, reinvesting, and trading in securities or other assets allowed under the Implementing Rules and Regulations (IRR) of the Investment Company Act. (Securities and Exchange Commission [SEC], 2018)
Co-loading (modified cabotage)	Co-loading refers to agreements between two or more international or domestic sea carriers whereby a sea carrier bound for a specified destination agrees to load, transport, and unload the container van or cargo of another carrier bound for the same destination. (RA 10668, 2015)
Commercial fishing	The catching of fish with the use of fishing boats with a capacity of more than three gross tons for trade, business or profit beyond subsistence or sports fishing. (PSA)

Commercial livestock farm/operator	Any livestock operator or farm which operation satisfies at least one of the following conditions: (a) at least 21 head of adults and zero young, (b) at least 41 head of young animals, and (c) at least 10 head of adults and 22 head of young animals. (PSA)
Commercial poultry farm/operator	Any poultry operator or farm which operation satisfies at least one of the following conditions: (a) 500 layers or 1,000 broilers, (b) 1000 layers and 100 broilers if raised in combination, and (c) 100 head of duck regardless of age. (PSA)
Commercialization	The process of deriving income or profit from a technology, such as the creation of a spin-off company, or through licensing, or the sale of the technology and/or intellectual property rights.
Communal Irrigation System	Type of irrigation systems covering an area of 1,000 hectares or less, which are constructed by National Irrigation Administration (NIA) with the participation of Irrigators' Associations (IAs). The operation and maintenance of the Communal Irrigation System (CIS) is turned over to the IAs upon project completion. (NIA)
Community and Service-Oriented Policing System	A philosophy of policing in which police officers work closely with the community and the local government by developing a sense of the character of the neighborhood through regular and informal contacts with residents and institutions in the area. (National Police Commission [NAPOLCOM] Implementing Guidelines for City/Municipality Community and Service-Oriented Policing System)
Community-based Forest Management Agreement	Partnership between the government and the local community, represented by people's organization, as forest managers, which has a term of 25 years, renewable for another 25 years. (DENR AO 2004-29)
Community-Based Monitoring System	Refers to an organized technology-based system of collecting, processing, and validating necessary disaggregated data that may be used for planning, program implementation, and impact monitoring at the local level while empowering communities to participate in the process. It involves the generation of data at the local level which serves as basis in targeting households in the planning, budgeting, and implementation of government programs geared towards poverty alleviation and economic development. (RA 11315, Section 3)
Competency standards	Written specifications of the knowledge, skills, attitudes, and values required for the performance of a job, occupation, or trade and the corresponding standard of performance required for these in the workplace. (National Statistical Coordination Board [NSCB], 2006)

Competition	Competitive market means a market with multiple buyers and multiple sellers, driving market prices lower and offering consumers more choices. A truly competitive market encourages efficiency and innovation, and forces businesses to excel. (Philippine Competition Commission [PCC])
Competition Assessment Manual	The manual developed by the PCC containing the process of evaluating government regulations, rules, bills, and other proposed government measures and laws, to identify those that may unnecessarily impede competition, and redesign identified regulations so that competition is not unduly inhibited.
Competitive neutrality	Competitive neutrality is the principle that recognizes that the GOCCs shall not enjoy net competitive advantages or be subjected to advantages over private sector businesses simply by virtue of public sector ownership, unless it can be clearly demonstrated that the greater public interest will be served and there is lack of commercial viability.
Completion rate	The percentage of first grade/year entrants in a level of education who complete/finish the level in accordance with the required number of years of study. (NSCB, 2006)
Comprehensive and Integrated Strategic Environmental Assessment	Otherwise known as Environmental Impact Assessment. It refers to the process of evaluating the likely impact of a project (including cumulative impacts) on the environment during construction, commissioning, operation, and abandonment. It also includes designing appropriate preventive, mitigating and enhancement measures addressing these consequences to the environment.
Comprehensive Automotive Resurgence Strategy Program	The program is being implemented by the DTI, in order to attract new investments, stimulate demand, and effectively implement industry regulations that will revitalize the Philippine automotive industry, and develop the country as a regional automotive manufacturing hub. The Comprehensive Automotive Resurgence Strategy (CARS) program is intended to augment and enhance the policy directions of existing motor vehicle development programs towards ensuring a resurgent automotive industry that supports innovation, technology transfer, environmental protection, and small and medium-sized enterprises (SME) development; enable the country's automotive industry to seize market opportunities opened by the ASEAN Economic Community and deepen its participation in the regional supply chain; and boost the manufacturing capability of the overall industrial sector, spur growth of SMEs, and create more jobs in the country.
Comprehensive Development Plan	A multi-sectoral development plan which serves as an action plan of every local government unit. It consolidates programs and projects necessary to carry out the objectives of different development sectors. (RA 7160, 1991)

Comprehensive Land Use Plan	A document formulated by the local government in consultation with its stakeholders, that defines or provides guidelines on the allocation, utilization, development, and management of all lands, within a given territory or jurisdiction, including municipal waters, according to the inherent qualities of the land itself and supportive economic, demographic, socio-cultural, and environmental objectives. (RA 11201, 2019)
Comprehensive Sexuality Education	Curriculum-based process of teaching and learning about the cognitive, emotional, physical, and social aspects of sexuality. It aims to equip children and young people with knowledge, skills, attitudes, and values that will empower them to realize their health, well-being, and dignity; develop respectful social and sexual relationships; consider how their choices affect their own well-being and that of others; and understand and ensure the protection of their rights throughout their lives. (United Nations Educational, Scientific and Cultural Organization [UNESCO], 2018)
Conflict sensitivity and peace promotion	The ability to understand the conflict context, understand how interventions interact with the conflict context, and act upon that understanding to minimize negative impacts and maximize positive impacts of interventions (DILG-Office of the Presidential Adviser on the Peace Process [OPAPP] JMC No. 1-2020 Conflict Sensitivity and Peace Promotion (CSPP) in the Comprehensive Development Plan (CDP) of LGUs in Conflict-Affected and Conflict-Vulnerable Areas)
Conflict-affected areas	Communities where there are actual armed encounters between the government forces and political armed groups, where political armed groups dominate the state of affairs of the community, or where other forms of violent conflicts exist. (PDP 2017-2022)
Conflict-vulnerable areas	Areas where the local and peripheral population is heavily impacted by the infighting of armed groups. (PDP 2017-2022)
Conformity assessment	A set or process ensuring the products, services, or systems meet or have the capability to meet the applicable requirements.
Contactless toll collection system	Refers to electronic tags or other cashless systems, such as, but not limited to, RFID, Automated Fare Collection System (AFCS), etc. (DOTr Order 2020-012 Requiring Cashless or Contactless Transaction for All Vehicles Traveling on Toll Expressways, 2020)
Contingent liabilities	Obligations that may or may not come due, depending on whether particular events occur. The probability of their occurrence may be exogenous to government policies (e.g., if they are related to natural disasters) or endogenous (e.g., if government programs create moral hazard). There are obligations that do not arise unless particular discrete events occur in the future.

Continuous Trial System	The guidelines for early and expeditious disposition of a case. It aims to protect and advance the constitutional right of persons to a speedy disposition of their criminal cases, reinforce and give teeth to existing rules on criminal procedures for court action and those which promote speedy disposition of criminal case, and introduce innovations and best practices for the benefit of the parties.
Control of corruption	A sub-indicator of the WB's Worldwide Governance Indicators. This is an aggregate indicator for the quality of governance that measures the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by private interests. (Kaufmann, Kraay, and Mastruzzi, 2010)
Convergence program	The complementation of agency initiatives within a defined area under a common intervention strategy to maximize impact.
Cooperative	Refers to an autonomous and duly registered association of persons, with a common bond of interest, who have voluntarily joined together to achieve their social, economic, and cultural needs and aspirations by making equitable contributions to the capital required, patronizing their products and services and accepting a fair share of the risks and benefits of the undertaking, in accordance with universally-accepted cooperative principles.
Co-payment	Refers to a flat fee or predetermined rate paid at point of service, as may be determined by the PhilHealth.
Coral cover	A measure of the proportion/percentage of reef surface covered by live or hard coral instead of sponges, algae, or other organisms. (National Oceanic and Atmospheric Administration [NOAA], 2019)
Coral reef	A natural aggregation of coral skeleton, with or without living coral polyps, occurring in intertidal and subtidal marine waters. (RA 8550, 1998)
Corruption Perceptions Index	Measures the perceived level of public sector corruption in 180 countries and territories based on 13 expert and business surveys. Crafted by Transparency International, the Index uses a score ranging from 0-100, where 0 means that a country is perceived as highly corrupt and a 100 means that a country is perceived as very clean. (Transparency International, 2019)
COVID-19	Disease caused by a new strain of coronavirus. 'CO' stands for corona, 'VI' for virus, and 'D' for disease. Formerly, this disease was referred to as '2019 novel coronavirus' or '2019-nCoV'. The COVID-19 virus is a new virus linked to the same family of viruses as Severe Acute Respiratory Syndrome (SARS) and some types of common cold.

Creative economy	Knowledge-based economic activities and the interplay between human creativity and ideas, knowledge and technology, as well as cultural values or artistic, cultural heritage and other individual or collective creative expressions. (UN General Assembly Resolution 74/198, 2020)
Creative industries	Industries which have their origin in individual creativity, skill, and talent, which have a potential for job and wealth creation through the generation and exploitation of intellectual property.
Credit guarantee	This scheme provides third-party credit risk mitigation to lenders through the absorption of a portion of the lender's losses on the loans made to SMEs in case of default, typically, in return for a fee. (WB)
Credit Surety Fund	A fund generated from the contributions of well-capitalized and well-managed cooperatives/NGOs, LGUs, government financial institutions (GFI), Industrial Guarantee and Loan Fund (IGLF), and other institutions/government agencies (GA) which shall serve as security for the loans that will be obtained by qualified borrowers from lending banks by way of a surety cover issued by the Board of Directors (BOD) of the Credit Surety Fund (CSF) Cooperative. Banks generally require collaterals when extending loans, a requirement that some MSMEs often find difficult to comply with.
Criminal Justice Information Exchange	The system that provides justice sector agencies the flexibility to develop their own information and communications technology (ICT) systems according to their needs and contemporaneously provides the framework that will generate the "commonalities" for easy interchange of crime-related data.
Critical information infrastructure	Computer systems, and/or networks, whether physical or virtual, and/or the computer programs, computer data, and/or traffic data vital to the country that the incapacity or destruction of, or interference with such systems and assets would have a debilitating impact on security, national or economic security, national public health and safety, or any combination of those matters. (National Cybersecurity Plan, 2022)
Critical watershed	A drainage area of a river system supporting existing and proposed hydroelectric power, irrigation works, or existing water facilities needing immediate protection and rehabilitation to minimize erosion and improve water yield. (Presidential Decree [PD] 1559, 1978).
Crop diversification	Crop diversification is intended to give a wider choice in the production of a variety of crops in a given area so as to expand production-related activities on various crops and also to lessen risk. (FAO)
Cropping intensity	The number of times a crop is planted per year in a given agricultural area. It is the ratio of effective crop area harvested to the physical area.

Crude death rate	The ratio of the number of deaths occurring within one year to mid-year population expressed per 1,000 population. (PSA, 2006)
Cultural diversity	The existence of a variety of cultural or ethnic groups within a society. (Oxford)
Cultural property	All products of human creativity by which a people and a nation reveal their identity, including churches, mosques, and other places of religious worship, schools and natural history specimens and sites, whether public or privately-owned, movable or immovable, and tangible or intangible. (RA 10066, 2009)
Cultural workers	Persons who work in the cultural industries, defined as a sector whose principal purpose, is the production or reproduction, promotion, distribution, or commercialisation of goods, services and activities of a cultural, artistic or heritage-related nature. (UNESCO, 2016)
Culture	Set of distinctive spiritual, material, intellectual and emotional features of society or a social group, that encompasses not only art and literature, but lifestyles, ways of living together, value system, traditions, and beliefs. (UNESCO, 2001)
Culture-sensitive	Refers to the quality of being compatible and appropriate to the culture, beliefs, customs and traditions, indigenous systems, and practices of indigenous cultural communities or indigenous peoples. (RA 8371 IRR, 1997)
Currency Rate Risk Protection Program	A non-deliverable USD/PHP forward (NDF) contract between the BSP and a universal/commercial bank (UB/KB) in response to the request of bank clients desiring to hedge their eligible foreign currency obligations.
Current account	A measure of the flows of goods, services, primary income, and secondary income between residents and nonresidents.
Cybercrime	A crime in which a computer is the object of the crime (hacking, phishing, spamming) or is used as a tool to commit an offense (child pornography, hate crimes). (National Cybersecurity Plan, 2022)
Cybersecurity	The collection of tools, policies, security concepts, security safeguards, guidelines, risk management approaches, actions, training, best practices, assurance, and technologies that can be used to protect the cyber environment and organization and user's assets. (National Cybersecurity Plan, 2022)
	Organization and user's assets include connected computing devices, personnel, infrastructure, applications, services, telecommunications systems, and the totality of transmitted and/or stored information in the cyber environment. Cybersecurity strives to ensure the attainment and maintenance of the security properties of the organization and user's assets against relevant security risks in the cyber environment.

Dangerous drugs	Drugs listed in the schedules annexed to the 1961 Single Convention on Narcotic Drugs, as amended by the 1972 Protocol, and in the schedules annexed to the 1971 Convention on Psychotropic Substances, as enumerated in the attached annex, which is an integral part of the Comprehensive Dangerous Drugs Act of 2002 (RA 9165).
Decommissioning	A process that includes activities aimed at achieving a smooth transition for the former combatants to productive civilian life. (Framework Agreement on the Bangsamoro, Annex on Normalization)
Demographic dividend	The demographic dividend is the accelerated development that can arise when a population has a relatively large proportion of working-age people coupled with effective human capital investment. (United Nations Fund for Population Activities [UNFPA])
Demographic transition	The change from a situation of high fertility and high mortality to one of low fertility and low mortality. A country that enters into a demographic transition experiences sizable changes in the age distribution of the population. (Mapa, 2016)
Dependable capacity	The load-carrying ability of a power plant during a specific time interval and period. The dependable capacity of a generating facility or transmission system is a fluctuating value that depends upon the available energy, the demand for that energy, the capability of the system to deliver that energy at a given moment, and the facilities available to handle increased capacity should the need arise.
Dependency ratio	Ratio between the number of children (0-14 years old) and older persons (65 years or over) to the working-age population (15-64 years old).
Development LIVE (DevLIVE)	A mobile application that allows citizens to provide feedback in terms of progress, timeliness, and effectiveness of local infrastructure projects in real time. It was developed by the DILG and the United Nations Development Programme (UNDP). (DILG, 2019)
Digital bank	A bank that offers financial products and services that are processed end-to-end through a digital platform and/or electronic channels with no physical branches. (BSP, 2020)
Digital connectivity	This serves as a key component of economies and societies to connect people, places, and ideas through digital networks, including wireless, wired, and satellite technologies to enable remote working and learning, e-commerce, and critical communications, among others. (Global Centre for Technology, Innovation and Sustainable Development, UNDP)

Digital divide	The gap between individuals, households, businesses, and geographic areas at different socioeconomic levels with regard to both their opportunities to access ICTs and to their use of the Internet for a wide variety of activities.
Digital economy	The digital economy refers to a broad range of economic activities that use digitized information and knowledge as key factors of production. The internet, cloud computing, big data, financial technology (fintech), and other new digital technologies are used to collect, store, analyze, and share information digitally and transform social interactions. The digitization of the economy creates benefits and efficiencies as digital technologies drive innovation and fuel job opportunities and economic growth. The digital economy also permeates all aspects of society, influencing the way people interact and bringing about broad sociological changes (Asian Development Bank [ADB], 2018)
Digital skills	A range of abilities to use digital devices, communication applications, and networks to access and manage information. They enable people to create and share digital content, communicate and collaborate, and solve problems for effective and creative self-fulfillment in life, learning, work, and social activities at large. (UNESCO)
Digitalization	The conversion of text, pictures, or sound into a digital form that can be processed by a computer. (Oxford)
Disaster	A serious disruption of the functioning of a community or a society involving widespread human, material, economic, or environmental losses and impacts which exceed the ability of the affected community or society to cope using its own resources. (RA 9729, 2009)
Disaster risk	The potential disaster loss (i.e., lives, health status, livelihoods, assets, services) which could occur to a particular community or a society over some specified future time period. (United Nations Office for Disaster Risk Reduction [UNDRR], 2009)
Disaster risk reduction	The concept and practice of reducing disaster risks through systematic efforts to analyze and manage the causal factors of disasters, including the reduction of exposure to hazards, lessening vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events. (United Nations International Strategy for Disaster Reduction [UNISDR] Secretariat, 2007; RA 10121, 2010)

Disaster risk reduction and management	The systematic process of using administrative directives, organizations, and operational skills and capacities to implement strategies, policies and improved coping capacities in order to lessen the adverse impacts of hazards and the possibility of disaster. Prospective disaster risk reduction and management (DRRM) refers to activities that address and seek to avoid the development of new or increased disaster risks, especially if risk reduction policies are not put in place. (RA 10121, 2010)
Discouraged workers	This refers to all persons without jobs and are not actively seeking/looking for work because they believe that there are no available jobs. (PSA's Labor Force Study [LFS] technical notes)
Disposition rate	The percentage of total case disposal over the total caseload.
Dissolved oxygen	The amount of oxygen dissolved in the water available for living aquatic organisms. (US Geological Survey)
Distribution utility	Any electric cooperative, private corporation, government-owned utility, or existing LGU, which has an exclusive franchise to operate a distribution system in accordance with RA 9136.
Documented overseas Filipinos	Filipinos abroad possessing proper documentation and status, as required by the host country. (Department of Foreign Affairs [DFA], 2019)
Dry port	An inland intermodal terminal directly connected to seaport(s) with high capacity transport mean(s), where customers can leave/pick up their standardised units as if directly to a seaport. (Roso, V., Woxenius, J., & Lumsden, K. [2009]. The dry port concept: connecting container seaports with the hinterland. <i>Journal of Transport Geography</i> , 17[5], 338-345.)
Dual Training System	This refers to an instructional delivery system of technical, vocational education and training that combines in-plant and in-school training based on a training plan collaboratively designed and implemented by an accredited dual system educational institution/training center and accredited dual system participating establishment. (Dual Training System [DTS] Act [RA 7686], 1994)
Early Childhood Care and Development	The holistic growth and development of children from age 0 to 4 years. The Early Childhood Care and Development (ECCD) System refers to the full range of health, nutrition, early education, and social services necessary to promote the optimum growth and development of children at these ages. (NSCB, 2006)

Ease of Doing Business report	A flagship report of the WB. An economy's ease of doing business (EODB) is computed into an index which aggregates the distance to frontier scores of different economies. The distance to frontier score uses the 'regulatory best practices' for doing business as the parameter and benchmark economies according to that parameter.
Eco-efficiency	Delivery of competitively-priced goods and services that satisfy human needs and bring quality of life, while progressively reducing ecological impact and resource intensity throughout the life cycle to a level, in line with the earth's carrying capacity.
Ecologically-sensitive area	Also known as an environmentally-critical area declared through Proclamation No. 2146. These areas have significant impacts if certain types/thresholds of proposed projects are located, developed, or implemented. (DENR AO 30, s. 2003)
E-Commerce Roadmap 2016-2020	The Philippines' first roadmap on e-commerce. The roadmap's main objective is to contribute 25 percent to the Philippines' gross domestic product (GDP) by 2020.
Economic zone	This refers to selected areas with highly developed or which have the potential to be developed into agri-industrial, industrial, tourist, recreational, commercial, banking, investment, and financial centers, whose metes and bounds are fixed or delimited by Presidential Proclamations.
Ecosystem	A dynamic complex of plant, animal, and micro-organism communities and their non-living environment interacting as a functional unit. (UNCBD)
Ecosystems approach to fisheries management	<p>An approach that strives to balance diverse societal objectives by taking into account the knowledge and uncertainties about biotic, abiotic, and human components of ecosystems and their interactions, and applying an integrated approach to fisheries within ecologically meaningful boundaries (FAO, 2014).</p> <p>An approach to fisheries management and development that strives to balance diverse societal objectives, by taking into account the knowledge and uncertainties about biotic, abiotic, and human components of ecosystems and their interactions and applying an integrated approach to fisheries within ecologically meaningful boundaries. (FAO, 2003)</p>
Ecotourism	A form of sustainable tourism within a natural and cultural heritage area where community participation, protection and management of natural resources, culture and indigenous knowledge and practices, environmental education and ethics, as well as economic benefits are fostered and pursued for the enrichment of host communities and the satisfaction of visitors. (Bohol Ecotourism Congress of 1999, National Ecotourism Strategy and Action Plan)

<i>e-Dalaw</i> facility	An online video calling system that aims to give inmates, who are visitorless, especially those who are indigent, sick, and/or aged, the opportunity to communicate and see their family members.
E-Governance	The public sector's use of ICTs with the aim of improving information and service delivery, encouraging citizen participation in the decision-making process, and making government more accountable, transparent, and effective. E-governance involves new styles of leadership, new ways of debating and deciding policy and investment, new ways of accessing education, new ways of listening to citizens, and new ways of organizing and delivering information and services. (UNESCO, as cited by Palvia and Sharma, 2021)
E-Government	The use of ICTs in the government to provide public services, to improve managerial effectiveness, and to promote democratic values, as well as a regulatory framework that facilitates information intensive initiatives and fosters the knowledge society.
El Niño	A large-scale oceanographic/meteorological phenomenon that develops in the Pacific Ocean, and is associated with extreme climatic variability (i.e., devastating rains, winds, drought, etc.). It is the migration from time to time of warm surface waters from the western equatorial Pacific basin to the eastern equatorial Pacific region, along the coasts of Peru and Ecuador. This condition can prevail for more than a year, thus, adversely affecting the economy in both local and global scale.
Electric cooperatives	A cooperative or corporation authorized to provide electric services pursuant to PD 269, as amended, and RA 6938 within the framework of the national rural electrification plan.
Electronic Receipt and Invoice System	Refers to the system developed and maintained by the e-Buyer or e-Seller or both in issuing invoice electronically through the internet. (Bureau of Internal Revenue [BIR], 2003)
Emerging and developing Asia	This includes Bangladesh, Bhutan, Brunei Darussalam, Cambodia, China, Fiji, India, Indonesia, Kiribati, Lao P.D.R., Malaysia, Maldives, Marshall Islands, Micronesia, Mongolia, Myanmar, Nauru, Nepal, Palau, Papua New Guinea, Philippines, Samoa, Solomon Islands, Sri Lanka, Thailand, Timor-Leste, Tonga, Tuvalu, Vanuatu, and Vietnam.

Emerging and developing economies	This includes Afghanistan, Albania, Algeria, Angola, Antigua and Barbuda, Argentina, Armenia, Aruba, Azerbaijan, The Bahamas, Bahrain, Bangladesh, Barbados, Belarus, Belize, Benin, Bhutan, Bolivia, Bosnia and Herzegovina, Botswana, Brazil, Brunei Darussalam, Bulgaria, Burkina Faso, Burundi, Cabo Verde, Cambodia, Cameroon, Central African Republic, Chad, Chile, China, Colombia, Comoros, Democratic Republic of the Congo, Republic of Congo, Costa Rica, Côte d'Ivoire, Croatia, Djibouti, Dominica, Dominican Republic, Ecuador, Egypt, El Salvador, Equatorial Guinea, Eritrea, Eswatini, Ethiopia, Fiji, Gabon, The Gambia, Georgia, Ghana, Grenada, Guatemala, Guinea, Guinea-Bissau, Guyana, Haiti, Honduras, Hungary, India, Indonesia, Iran, Iraq, Jamaica, Jordan, Kazakhstan, Kenya, Kiribati, Kosovo, Kuwait, Kyrgyz Republic, Lao P.D.R., Lebanon, Lesotho, Liberia, Libya, Madagascar, Malawi, Malaysia, Maldives, Mali, Marshall Islands, Mauritania, Mauritius, Mexico, Micronesia, Moldova, Mongolia, Montenegro, Morocco, Mozambique, Myanmar, Namibia, Nauru, Nepal, Nicaragua, Niger, Nigeria, North Macedonia, Oman, Pakistan, Palau, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Poland, Qatar, Romania, Russia, Rwanda, Samoa, São Tomé and Príncipe, Saudi Arabia, Senegal, Serbia, Seychelles, Sierra Leone, Solomon Islands, Somalia, South Africa, South Sudan, Sri Lanka, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Sudan, Suriname, Syria, Tajikistan, Tanzania, Thailand, Timor-Leste, Togo, Tonga, Trinidad and Tobago, Tunisia, Turkey, Turkmenistan, Tuvalu, Uganda, Ukraine, United Arab Emirates, Uruguay, Uzbekistan, Vanuatu, Venezuela, Vietnam, West Bank and Gaza, Yemen, Zambia, and Zimbabwe.
Employability	The quality of being suitable for paid work. (Oxford)
Employment facilitation service/s	This refers to the programs of government (either independently or in collaboration with other institutions) to expedite the process of looking for a job among those unemployed.
Energy intensity	This is calculated as units of energy per unit of GDP (i.e., million tons oil equivalent per GDP in billion pesos).
Enhanced e-Warrant System	An online database of warrants of arrest, providing real-time updates on the status of warrants and the specific actions taken by law enforcement agents.
EU-27 (since 2020 with the exclusion of the UK)	This includes Belgium, Denmark, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Austria, Finland, Sweden, Cyprus, Czechia, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, Slovenia, Bulgaria, Romania, and Croatia.
Euro Area-19	This includes Belgium, Germany, Estonia, Ireland, Greece, Spain, France, Italy, Cyprus, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Austria, Portugal, Slovenia, Slovakia, and Finland.

Export processing zones	A specialized industrial estate located physically and/or administratively outside customs territory, predominantly oriented to export production. Enterprises located in export processing zones are allowed to import capital equipment and raw materials free from duties, taxes, and other import restrictions.
Extended producers responsibility	A policy approach wherein producers are given significant responsibility for the treatment or disposal of post-consumer products. (Organization for Economic Co-operation and Development [OECD], 2001)
Extreme poverty	Individuals or households living on less than USD1.90 a day
Fabrication laboratory	A small-scale learning and production space that offers access to modern technology and where experts can instruct learners in its use. Typically, a fabrication laboratory (FabLab) allows students the opportunity to practice on equipment that may normally be difficult to get access to, or for industry and entrepreneurs to build, prototype, and test their products on a very small-scale without the need for large investments in technology. (UNESCO Vocational Education (UNEVOC) Network)
Farm mechanization	The application of tools, implements, and machinery in order to achieve agricultural production. (Clarke, 1997)
Farm Mechanization Program	This aims to increase farmers' productivity, profitability, and competitiveness through mechanized production and post-production systems.
Farm-to-market roads	These are roads linking agriculture and fisheries production sites, coastal landing points, and post-harvest facilities to the market and arterial roads and highways. (RA 8435, 1997)
Financial technology	This is also known as fintech. It refers to the integration of technology into offerings by financial services companies in order to improve their use and delivery to consumers.
Financing	The means by which a government provides financial resources to cover a budget deficit or allocates financial resources arising from a budget surplus. (DBM, 2020)
Firmed-up service area	This refers to the functional size of the irrigation system (i.e., the irrigable part of the service area minus the permanently un-irrigable areas).
First 1,000 days of life	This refers to the period of a child's life, spanning the nine months in the womb starting from conception to the first 24 months of life, which is considered to be the critical window of opportunity to promote health and development and prevent malnutrition and its life-long consequences.

Fiscal policy	The part of government policy which is concerned with raising of resources through taxation and borrowing and deciding on the level and pattern of expenditures. (DBM, 2020)
Fiscal position	This refers to either the shortfall/deficiency (deficit) or excess (surplus) of revenues over expenditures of the government.
Fisherfolk	This refers to those who are directly or personally and physically engaged in catching and/or culturing and processing fishery and/or aquatic resources. (RA 8550, 1998)
Flexible learning	A pedagogical approach allowing flexibility of time, place, and audience, including but not solely focused on the use of technology. It commonly uses the delivery methods of distance education and facilities of education technology, but may vary depending on the levels of technology, availability of devices, internet connectivity, level of digital literacy, and approaches. (Commission on Higher Education [CHED], 2020)
Flexible work arrangement	This refers to alternative arrangements or schedules other than the traditional or standard work hours, workdays, and workweek. (DOLE DO 2, s. 2019)
Flood-susceptible area/s	This are areas identified by the DPWH based on completed studies for 37 flood control projects.
Food Innovation Center	Centers established in each region of the country to serve as a hub for innovations, R&D, and support services for value-adding of fresh produce and development of processed foods. It is envisioned that through the center, innovative technologies, relevant support services, technical expertise, necessary infrastructures, and facilities will be more accessible for MSMEs in urban centers and countryside for a more effective technology application, deployment (transfer), and commercialization for sustained economic growth and productivity. (DOST-National Capital Region [NCR])
Food resiliency	This refers to having food security during times of crisis or emergencies.
Food security	This refers to access to safe and affordable food at all times. A condition where all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life. (FAO, 2002)
Force multiplier/s	Organizations outside the government which perform voluntary public safety services in support of existing government public safety function and programs. (Philippine National Police [PNP] <i>Kaligkasan</i> Volunteer Program)

Foreign Direct Investment	<p>A category of cross-border investment associated with a resident in one economy having control or a significant degree of influence on the management of an enterprise that is resident in another economy. The BSP’s foreign direct investment data includes investments where ownership by the foreign enterprise is at least 10 percent.</p> <p>The category of international investment made by a resident entity in one economy (direct investor) with the objective of establishing/obtaining a lasting interest in an enterprise resident in an economy other than that of the investor (direct investment enterprise). “Lasting interest” implies the existence of a long-term relationship between the direct investor and the enterprise and a significant degree of influence by the direct investor on the management of the direct investment enterprise. Direct investment involves both the initial transaction between the two entities and all subsequent transactions between them and among affiliated enterprises, both incorporated and unincorporated.</p>
Foreign exchange reserves	A measure of the stocks of foreign currency-denominated assets plus, in some cases, gold, held by a central bank.
Forest cover/s	These are natural and man-made forests, including forests within wetlands and built-up areas. (Philippine Official Reference for Forest-Related Terms and Definitions)
Forest land	A land which includes public forest, permanent forest or forest reserves, and forest reservations. (PD 1559, 1978)
Forward and backward linkages	The channels through which products, materials, information, and money flow from suppliers to the firms (backward) and from suppliers to customers (forward). Backward and forward linkages are also descriptive measures of the economic interdependence of industries.
Forward linkages	This indicates an interdependency (interconnectedness) of a particular industry with the “downstream” sectors from which it purchases its intermediate inputs directly and/or indirectly.
Fourth Industrial Revolution	<p>This is characterized by a fusion of technologies blurring the lines of physical, digital, and biological spheres. (World Economic Forum [WEF], 2016)</p> <p>Developments in genetics, artificial intelligence, robotics, nanotechnology, 3D printing, biotechnology, and other technologies have ushered in the Fourth Industrial Revolution (FIRe or Industry 4.0). These technologies are expected to alter the patterns of consumption, production, and employment which will require proactive adaptation by corporations, governments, and individuals.</p>

Free trade agreements	An agreement between two or more countries to facilitate trade by reducing or eliminating barriers to trade such as tariffs.
Fuel marking	A monitoring mechanism to curtail fuel smuggling activities through the use of official fuel markers based on, among others, covert molecular recognition technology.
Fully immunized children	This refers to infants who received one dose of tuberculosis vaccine or Bacillus Calmette-Guerin (BCG) vaccine, three doses each of oral polio vaccine, diphtheria, tetanus, and pertussis vaccine, and Hepatitis B vaccines, and one dose of measles vaccine before reaching one year of age.
Functional literacy	A significantly higher level of literacy which includes not only reading and writing skills but also numerical skills. The skills must be sufficiently advanced to enable the individual to participate fully and efficiently in activities commonly occurring in her/his life situation that require a reasonable capability of communicating by written language. (PSA, 2015)
General government gross debt	This includes all liabilities that require payment or payments of interest and/or principal by the debtor to the creditor at the date/s in the future. These include debt liabilities, such as special drawing rights (SDR), currency and deposits, debt securities, loans, insurance, pensions and standardized guarantee schemes, and other accounts payable. Debt can be valued at current market, nominal, or face values. (Government Finance Statistics Manual [GFSM] 2001, paragraph 7.110)
Genetic resources	This refers to all living organisms (i.e., plants, animals, and microbes) carrying genetic material that could be potentially useful to humans. These resources can be taken from the wild, domesticated, or cultivated. They are sourced from environments in which they occur naturally (in situ), or from human-made collections such as botanical gardens, genebanks, seed banks, and microbial culture collections (ex situ). (UNCBD)
Geographic indication	A sign used on products that have a specific geographical origin and possess qualities or a reputation that are due to that origin. In order to function as a geographic indication (GI), a sign must identify a product as originating in a given place.
Geographic Information System platform	A conceptualized framework that provides the ability to capture and analyze spatial and geographic data. Geographic Information System (GIS) applications (apps) are computer-based tools that allow the user to create interactive queries (user-created searches), store and edit spatial and non-spatial data, analyze spatial information output, and visually share the results of these operations by presenting them as maps.

Geologic hazard	Hazards originating from internal earth processes, such as earthquakes, volcanic eruptions, landslides, rockslides, surface collapses, and debris or mudflows. (UNDRR)
Greenhouse gas emissions	These are gaseous constituents of the atmosphere, either natural or anthropogenic (as a result of human activity), that absorb and emit radiation at specific wavelengths within the spectrum of thermal infrared radiation emitted by the Earth's surface, the atmosphere itself, and by clouds. These gases surround the planet preventing the loss of heat into outer space. By trapping the heat, they contribute to the warming of the earth's surface causing changes in weather conditions, sea levels, and land use patterns, commonly referred to as "climate change." (Intergovernmental Panel on Climate Change [IPCC] 2, 2007)
Gig economy	A broad term that includes "contingent work" characterized by a defined or limited duration, such as freelance contracting and consulting. (WEF, 2020)
Global Competitiveness Index	A set of institutions, policies, and factors that determine the level of productivity of a country, conditions of public institutions, and technical conditions. Created by the WEF, the index measures competitiveness based on twelve pillars: institutions, infrastructure, ICT adoption, macroeconomic stability, health, skills, product market, labor market, financial system, market size, business dynamism, and innovation capability. (Schwab, 2019)
Global e-Governance Development Index	A composite measure of three dimensions of e-Government, namely, provision of online services, telecommunication connectivity, and human capacity. Along with an assessment of the website development patterns in a country, the index incorporates the access characteristics, such as the infrastructure and educational levels, to reflect how a country is using information technologies (IT) to promote access and inclusion of its people. Developed by the UN, the index is updated every two years. (UN, 2019)
Global emissions	This is composed of greenhouse or CO ₂ emissions due to fossil fuel combustion.
Global Innovation Index	This provides detailed metrics about the innovation performance of 131 countries and economies around the world. Its 80 indicators explore a broad vision of innovation, including political environment, education, infrastructure, and business sophistication. (World Intellectual Property Organization [WIPO])
Global Preparedness Monitoring Board	This is established under the recommendation of the UN Secretary General's Global Health Crises Task Force in 2017, the Global Preparedness Monitoring Board (GPMB) is an independent monitoring and accountability agency composed of political leaders, agency principals, and industry experts. Its goal is to ensure preparedness for global health crises.

Global supply chains	Networks that can span across multiple continents and countries for sourcing and supplying goods and services. Global supply chains involve the flow of information, processes, and resources across the globe.
Global value chain	<p>This refers to international production sharing, where the different stages of the production process are located across different countries.</p> <p>A system of international production, trade and investments across the globe, interconnected through the varying stages of production procedures in different countries.</p>
Good agricultural practice	A collection of principles to apply for on-farm production and postproduction processes, resulting in safe and healthy food and non-food agriculture products, while taking into account economic, social, and environmental sustainability. (FAO Committee on Agriculture, 2003)
Good Conduct Time Allowance Law	An act that allows for a reduction of sentences of persons deprived of liberty, depending on how well they abide by rules and regulations inside “any penal institution, rehabilitation, or detention center or any other local jail.”
Government effectiveness	A sub-indicator of WB’s Worldwide Governance Indicators. This is an indicator that measures the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government’s commitment to such policies. (Kaufmann, Kraay and Mastruzzi, 2010)
Greater Capital Region	This consists of NCR and Regions III (Central Luzon) and IV-A (CALABARZON).
Green bond	A debt security that is issued to raise capital specifically to support climate-related or environmental projects. (WB, 2015)
Green technology	This refers to use of technology and science that are environmentally friendly.
Grid	The high voltage backbone system of interconnected transmission lines, substations, and related facilities.
Gross Domestic Product	The value of all goods and services produced domestically. It is the sum of gross value added of all resident institutional units engaged in production (plus any taxes, and minus any subsidies, on products not included in the values of their outputs).
Gross National Income	The sum of value added by all resident producers plus any product taxes (less subsidies) not included in the valuation of output plus net receipts of primary income (compensation of employees and property income) from abroad. (WB)

Gross value added	The total payment to factors of production, namely, wages, interest, profits, and rents. It also includes capital consumption allowance and indirect taxes. It is estimated by deducting from gross value of output the sum of non-factor cost such as raw materials and supplies, containers and packing materials, fuel, advertising, and other non-industrial overhead cost.
Ground water recharge	The entry into the saturated zone of water made available at the water table surface, together with the associated flow away from the water table within the saturated zone. (Freeze & Cherry, 1979)
Habitat	The place or environment where a plant or animal naturally or normally lives and grows. (Merriam-Webster)
Harmonized National R&D Agenda	A blueprint of the priority R&D areas that will be pursued by the country to address societal needs and achieve inclusive socioeconomic development. A product of comprehensive and widespread consultation with various stakeholders, that aims to provide direction on the government-funded R&D programs and projects, provide an important step in enhancing the effective allocation and efficient use of public investments in R&D and avoid duplication of R&D pursuits, and promote complementation among government research institutions.
Hazardous waste/s	These are used or discarded substances or materials that are without any safe commercial, industrial, agricultural, or economic uses, and which pose substantial or potential threats to public health and/or the environment. (RA 6969, 1990)
Health Facilities Enhancement Program	A priority program of the DOH, attempting to address perennial shortages in health facilities by augmenting capital investments in the national and LGU health facilities. (Philippine Health Facility Development Plan 2020-2040)
Health impact assessment	This refers to a means of assessing the health impacts of policies, programs, and projects in diverse economic sectors before, during, and after implementation. It provides practical and alternative recommendations to increase positive health effects and minimize negative health effects.
Health technology assessment	This refers to systematic evaluation of properties, effects, or impact of health-related technologies, devices, medicines, vaccines, procedures, and all other health-related systems developed to solve a health problem and improve quality of lives and health outcomes, utilizing a multidisciplinary process to evaluate the social, economic, organizational, and ethical issues of a health intervention or health technology
Healthcare waste	This includes waste generated as a result of the following: (a) diagnosis, treatment, or immunization of human beings or animals; (b) research pertaining to the aforesaid activities; (c) production or testing of biologicals; and (d) waste originating from minor or scattered sources. (DENR-DOH JAO 2005-02)

Heritage	The totality of cultural property preserved and developed through time and passed on to posterity. (RA 10066, 2009)
High trust	A high-trust society is one when the behavior of the population towards each other is predictable – meaning we, as people, follow broadly understood norms of behavior supported by rule of law. (Chakas, 2019)
High-value crops	<p>Non-traditional agricultural and horticultural commodities that include coffee, cacao, fruits, root crops, vegetables, spices and condiments, cutflowers, and ornamental plants. (PDP 2017-2022)</p> <p>Crops other than traditional crops which include, but are not limited to coffee and cacao, fruit crops, root crops, vegetable crops, legumes, pole sitao, spices and condiments, and cutflower and ornamental foliage plants. (High-Value Crops Development Act [RA 7900], 1995)</p>
Higher education	The stage of formal education requiring secondary education covering the programs on all courses of study leading to bachelor’s degree and all degree courses of study beyond bachelor’s degree level. (NSCB, 2006)
Hospice care	End-of-life care provided by skilled health care providers and volunteers. The goal of the care is to help people who are dying to have peace, comfort, and dignity by providing medical, psychological, and spiritual support. Hospice programs also provide services to support a patient's family.
Housing	A multi-dimensional concept relating to the process of residing and the objects of dwelling whose main attributes are location relative to access to livelihood, tenure arrangements, cost, and physical structure, as well as their environment. (RA 11201, 2019)
Housing finance	The comprehensive funds flow system covering the entire housing provision cycle from identification of financial requirements to fund sourcing for various aspects of the housing program, such as lot acquisition, development/construction and end-users’ financing, and securitization of home mortgages and other housing-related receivables or financial products. (RA 11201, 2019)
Housing need	The number of conventional dwellings or other suitable living quarters that need to be constructed or repaired, in order to bring housing conditions, as of a particular point in time, up to nationally-adopted standards, plus the number that need to be constructed, repaired, or maintained to ensure that housing conditions remain at the standard level over a stated period of time. (Senate Joint Resolution 17, 2018). Composed of accumulated, future, and recurrent structure demands, with allowance for inventory losses and increase in households. (Philippine Statistical Research and Training Institute (PSRTI), 2016)

Human capital	The skills, knowledge, and experience possessed by an individual or population, viewed in terms of their value or cost to an organization or country. (Oxford)
Human Capital Index	Amount of human capital child born today could expect to attain by age 18, given the risks to poor health and education that prevail in the country, where the child lives. (WB, 2020)
Human Development Index	An assessment or a measure of the development of a country in key dimensions of human development: long and healthy life, knowledge, and decent standard of living. (UNDP)
Human settlements	This refers to and comprised of the physical components of shelter and infrastructure and services to which the physical elements provide support, such as community services which include education, health, culture, welfare, recreation, and nutrition. (RA 11201, 2019)
Humanitarian logistics	The processes and systems involving the mobilization of people, resources, and expertise to help vulnerable communities affected by natural disasters and complex emergencies, reducing the loss of lives, and relieving human suffering. (Nappi, M. M. L., & Souza, J. C. [2015], Disaster Management: Hierarchical structuring criteria for selection and location of temporary shelters, Natural Hazards, 75[3], 2421-2436.)
Hydrometeorological hazard	Hazard from the atmospheric, hydrological, or oceanographic origin such as tropical cyclones, floods, drought, heatwaves, and coastal storm surges. (United Nations Office for Disaster Risk Reduction [UNDRR])
Hydroponics	Cultivation of plants in water without soil. (FAO)
Illegal fishing	Fishing activities conducted by Philippine fishing vessels operating in violation of the Philippine laws, Regional Fisheries Management Organization resolutions, and laws of other coastal states. (RA 10654, 2015)
Improved sanitation	Sanitation facilities that are designed to hygienically separate excreta from human contact. These include the following: flush/pour flush to piped sewer systems, septic tanks, or pit latrines; ventilated improved pit latrines, composting toilets, or pit latrines with slabs. (PSA, 2017)
In absentia	While not present at the event being referred to. (Oxford)
Inactive members	In general, OFWs who have failed to pay for their membership within the required time or have not renewed their membership status, to qualify for full eligibility of benefits of OWWA/Pag-IBIG/SSS/Philhealth. (NEDA, 2019)

In-city resettlement	A relocation site within the jurisdiction of the local government unit where the informal settler families are living. (IRR of RA 11201, 2019)
Inclusive business	A business model with strong inter-linkages between medium and large companies, as well as small and medium enterprises (SMEs).
Inclusive Filipinnovation and Entrepreneurship Roadmap	This refers to the country's inclusive innovation-led industrial policy to transform the economy in the digital age.
Inclusive growth	Growth that is rapid enough to matter, given the country's large population, geographical differences, and social complexity. It is sustained growth that creates jobs, draws the vast majority into the economic and social mainstream, and continuously reduces mass poverty.
Index crime solution efficiency rate	The percentage of solved cases out of the total number of crime incidents handled by law enforcement agencies for a given period of time. A case shall be considered solved when the following elements occur: the offender has been identified; there is sufficient evidence to charge him; the offender has been taken into custody; and the offender has been charged before the prosecutor's office or court of appropriate jurisdiction. (PNP Letter of Instructions on Unit Crime Periodic Report)
Index crimes	Crimes which are serious in nature and which occur with sufficient frequency and regularity such that they can serve index to the crime situation, the policy considers only the crimes of murder, homicide, physical injuries (including frustrated murder and homicide), carnapping, cattle rustling, robbery, theft, and rape as index crimes. (PNP Crime Information Reporting and Analysis System)
Indigenous cultural communities	A group of people or homogenous societies identified by self-ascription and ascription by other, who have continuously lived as organized community on communally bounded and defined territory, and who have, under claims of ownership since time immemorial, occupied, possessed customs, tradition, and other distinctive cultural traits, or who have, through resistance to political, social, and cultural inroads of colonization, non-indigenous religions and culture, become historically differentiated from the majority of Filipinos. (RA 8371, 1997)

Indigenous peoples	People who are regarded as indigenous on account of their descent from the populations, which inhabited the country, at the time of conquest or colonization or at the time of inroads of non-indigenous religions and cultures or the establishment of present state boundaries who retain some or all of their own social, economic, cultural, and political institutions, but who may have been displaced from their traditional domains or who may have resettled outside their ancestral domains. (RA 8371, 1997)
Indigenous peoples education	The education intended to meet basic learning needs of IPs, which lays the foundation for subsequent learning. It aims to eliminate discrimination from peers and teachers due to learners' cultural identity. It recognizes the need to respect Indigenous Knowledge Systems and Practices (IKSP) in schools and learning programs, promotes respect and due regard for the inherent meanings and purposes of indigenous cultural expressions and values, and promotes an affirmation and sense of indigenous cultural identity that sustain inter-generational relationships and cultural integrity in the community.
Industrial design	The ornamental or aesthetic aspect of an article. The design may consist of three-dimensional features, such as the shape or surface of an article, or two-dimensional features, such as patterns, lines or color. It is applied to a wide variety of products of industry and handicraft: (a) from technical and medical instruments to watches, jewelry, and other luxury items; (b) from housewares and electrical appliances to vehicles; and (c) from textile designs to leisure goods. To be protected under most national laws, an industrial design must be non-functional. This means that an industrial design is primarily of an aesthetic nature and any technical features of the article to which it is applied are not protected.
Industry 4.0 pilot factory	The DTI is working on the establishment of an Industry 4.0 pilot factory, which will house cutting-edge manufacturing technologies like advanced robotics, intelligence-of-things, drones, virtual and augmented reality for factory simulations, among others. (DTI)
Industry 4.0 SME academy	DTI is establishing an SME Academy and Innovation Center to enhance manufacturing innovation and develop the human resource capabilities of our small enterprises to ensure resilience and competitiveness in the FIRE. (DTI)
Infant mortality rate	The probability of dying between birth and age one, expressed as the number of infant deaths or deaths occurring before reaching 12 months of life, in a given period, per 1,000 live births. (PSA, 2006)

Information and communication technology	An umbrella term that covers all technical means for processing and communicating information. It defines a broad range of technologies, including methods for communication (communication protocols, transmission techniques, communications equipment, media communication), as well as techniques for storing and processing information (computing, data storage, etc.).
Initial public offering	This refers to when a private company with a profitable track record raises capital by offering its shares to public investors. It is also the distribution or offer to sell new shares and/or existing shares of a company to the general public. (Philippine Stock Exchange)
Inland container depot/terminal	Inland container depots are dry ports equipped for handling and temporary storage of containerized cargo as well as empty containers. These depots allow customers in remote locations to receive port services more conveniently and closer to their premises. (Wadhwa, S. S., Farahmand, K., & Vachal, K. [2019].A deterministic mathematical model to support future investment decisions for developing inland container terminals. <i>Research in Transportation Economics</i> , 77, 100764.)
Inland municipal fishing	The catching of fish, crustaceans, mollusks, and all other aquatic animals and plants in inland waters like lakes, rivers, dams, marshes, etc., using simple gear and fishing boats, some of which are non-motorized with a capacity of less than or equal to three gross tons, or fishing not requiring the use of fishing boats. (PSA)
Innovation	The process of using knowledge and technology to develop or improve the production or performance of products, services, and processes that have value, in terms of commercial impact or social benefit. (UN Conference on Trade and Development [UNCTAD], 2019)
Innovation and Technology Support Office	Universities and institution-partners of the Intellectual Property Office of the Philippines (IPOP HL) have been equipped with in-house patent libraries. The network of Innovation and Technology Support Offices (ITSO) seeks to foster creation of intellectual property in the academe and research sectors, particularly in invention and utility models, to increase the national innovative output and push the presence of Filipino inventions in the international patent system. (IPOP HL)
InstaPay	An electronic fund transfer (EFT) service that allows customers to transfer PHP funds almost instantly between accounts of participating BSP-supervised banks and non-bank e-money issuers in the Philippines. (BSP)

Instrument landing system	The most popular landing aid in the world. It is a distance-angled support system for landing in reduced visibility, while its task is the safe conduct of the aircraft from the prescribed course landing on the approach path. (Merkisz, J., Galant, M., & Bieda, M. [2017]. Analysis of operating instrument landing system accuracy under simulated conditions. <i>Zeszyty Naukowe</i> . Transport/Politechnika Śląska.)
Integrated coastal management	A dynamic process of planning and management, involving stakeholders, and requiring the analysis of the environmental and socioeconomic implications of development, the ecosystem processes, and the interrelationships among land-based and marine-related activities across jurisdictions. (EO 533, 2006)
Integrated farming system	This refers to the production, integrated management, and comprehensive use of aquaculture, agriculture, and livestock. (FAO)
Integrated Forest Management Agreement	A production-sharing contract entered into by and between the DENR and a qualified applicant, where the DENR grants the latter the exclusive right to develop, manage, protect, and utilize a specified area of forestland and forest resource therein for a period of 25 years and may be renewed for another 25-year period, consistent with the principle of sustainable development and in accordance with an approved Comprehensive Development and Management Plan, and under which both parties share in its produce. (DENR AO No. 1999-53)
Integrated rice-duck farming system	This system is about growing rice and ducks together in an irrigated paddy field. The paddling movement of the ducks stimulates plant growth, while the duck manure naturally fertilizes the soil. The ducks also eat harmful insects and weeds, thus eliminating the need for pesticides and herbicides.
Integrated water resource management	The process which promotes the coordinated development and management of water, land and related resources, in order to maximize economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems.
Intellectual property	The intangible assets resulting from the creative work of an individual or organization. Intellectual property also refers to creations of the mind, such as inventions, literary and artistic works, symbols, names, images, and designs used in commerce. It can also refer to future tangible and/or intangible assets that may be recognized as intellectual property.
Intellectual property rights	These are the rights given to persons over the creations of their minds. This is where the creators are given exclusive rights over the use of his/her creation for a certain period of time. (WTO)
Inter alia	Among other things. (Oxford)

Interest rate corridor	A system for guiding short-term market interest rates towards the central bank (CB) target/policy rate. It consists of a rate at which the CB lends to banks (typically an overnight lending rate) and a rate at which it takes deposits from them (deposit rate). (BSP, 2016)
Intermodal	This refers to involving different transport modes on one route. (Jonuschat, H., Stephan, K., & Schelewsky, M. [2015]. Understanding multimodal and intermodal mobility. <i>Sustainable Urban Transport</i> . Emerald Group Publishing Limited.)
Intermodal transport	This refers to the transit of people and freight involving two or more different transport modes that are efficiently connected and coordinated. (Muller, G., 1999. <i>Intermodal Freight Transportation - 4th Edition</i> . ENO Transport Foundation)
Internal revenue allotment	Automatically appropriated and released share of LGUs, aggregately corresponding to 40 percent of the national internal revenue taxes based on the collection of the third fiscal year preceding the current fiscal year, with the share of each LGU determined, pursuant to the provisions of the Local Government Code, by share for each LGU level, and in terms of population/land area/equal sharing. (DBM, 2020)
International Large-Scale Assessments	Large-Scale Assessments measure student learning outcomes, in particular learning areas or domains, and are used to measure what learners know and can do based on standard criteria or expectations (DepEd Order 29, s. 2017) International Large-Scale Assessments (ILSA) conducted by external organizations, include the Organisation for Economic Co-operation and Development's (OECD) Programme for International Student Assessment (PISA), the International Education Association's Trends in International Mathematics and Science Study (TIMSS), and the Southeast Asian Ministers of Education Association's (SEAMEO) Southeast Asia-Primary Learning Metrics (SEA-PLM).
Internationalization of higher education	The process of integrating international, intercultural, and global dimensions into the goals, functions (teaching, learning, research and services), and delivery of higher education. (RA 11448, 2019)

Internet of things	<p>This refers to the network between the internet and an increasing number of devices and objects over time. All devices and objects that may be altered through the internet, with or without the active involvement of individuals.</p> <p>It also refers to the connectivity and association of electronic devices, vehicles (also called as “connected devices” and “smart devices”), structures, buildings, and other devices with electronics, software, sensors, actuators, and communication capabilities, which equip the said items to send, transmit, and process information. Internet of things (IoT) enables objects to be monitored and controlled remotely using established communications networks, opening the potential of emergence between the physical systems in computerized and digital systems, increasing efficiency, accuracy, and productivity, while reducing human interactions.</p>
Internship/ Supervised Industry Learning	<p>This refers to an approach in learning designed to complement the training gained in the institution with the intention of enhancing the knowledge and skills of a learner through actual application of critical competencies in the workplace, as identified in the training regulations. It is commonly used as synonymous to On-the-Job Training (OJT) and Supervised Industry Training (SIT), henceforth, for technical and vocational education and training (TVET). The terms OJT and SIT will be renamed to Supervised Industry Learning (SIL), which will focus on the learner’s enhancement of critical competency in a workplace setting. (TESDA Circular 89, s. 2019)</p>
Invention	<p>New or novel practical applications of knowledge, technology, and ideas that come from experience, scientific enquiry, and research and development. (UNCTAD, 2019)</p>
Intellectual property depot	<p>IPOPHL’s online shopping platform to serve both intellectual property creators and users. It is a free marketing space for intellectual property creators, who may post and promote their assets on the site, and for businesses or individuals looking for assets to commercialise. It is also a marketplace for intellectual property open for license or sale.</p>
Irrigation development	<p>This refers to the ratio of the area that was developed altogether by the National Irrigation Administration (NIA), other government agencies, and private sector against the potential irrigable area. (NIA)</p>
Irrigators’ associations	<p>A non-sectarian, non-stock, and non-profit organization of farmers. (NIA)</p>
Job automation	<p>This refers to the substitution of technology for human labor.</p>

Justice Sector Coordinating Council	An inter-agency body composed of the Judiciary, the Department of Justice (DOJ), DILG, and their relevant attached agencies, which serves as a joint forum for dialogue on issues of common interest and mechanism for effective coordination and sharing of information for planning and implementation of joint initiatives.
Justice zone	An area or locality where a minimum number of inter-agency coordinative reforms are present, rendering that area or locality compliant, based on the selection and rating criteria to be established by the Justice Sector Coordinating Council (JSCC).
K to 12 Program	This covers the Kindergarten (K) and 12 years of basic education (six years of primary education, four years of junior high school, and two years of senior high school [SHS]) to provide sufficient time for mastery of concepts and skills, develop lifelong learners, and prepare graduates for tertiary education, middle-level skills development, employment, and entrepreneurship.
<i>Kapatid</i> Mentor ME	A program implemented by the DTI in partnership with the Philippine Center for Entrepreneurship (PCE), which aims to help MSMEs scale up their business through weekly coaching and mentoring by business owners and practitioners on different functional areas of entrepreneurship, to be held in Negosyo Centers, nationwide.
<i>Katarungang Pambarangay</i>	A system of dispute resolution instituted in all barangays in the Philippines that seeks to promote, among others, the speedy administration of justice by providing all avenues to an amicable settlement of community-level disputes.
Knowledge economy	An economy, in which growth, is dependent on the quantity, quality, and accessibility of the information available rather than the means of production. (Oxford)
Labor force	This refers to the population 15 years old and over, who contribute to the production of goods and services in the country. It is comprised of the employed and unemployed. (PSA)
Labor force participation rate	This refers to the total labor force as a percentage share of total working age population (15 years old and over). (PSA Metadata, 2018)
Labor productivity	Labor productivity in agriculture, forestry, and fishery pertains to the value of agricultural output per employed person in agriculture, forestry, and fisheries.
Land banking	The acquisition of land at values based on existing use in advance of actual need to promote planned development and socialized housing programs. (IRR of RA 11201, 2019)

Large scale irrigation system	Type of irrigation systems constructed by the NIA usually covering more than 1,000 hectares. These are jointly operated and maintained by the NIA and the farmer beneficiaries through their irrigators' associations. (PDP 2017-2022)
Last mile school	Schools with less than four classrooms, usually makeshift and non-standard ones, with no electricity, no funds for repairs or new construction projects in the last four years, and travel distance of more than one hour away from the center, accessible only through difficult terrain. Likewise, these are schools with multi-grade classes, less than five teachers, and a population of less than 100 learners, in which more than 75 percent of whom are IPs.
Lateral Attrition Act	This act provides a reward and punishment system to tax collectors with the aim of increasing revenue collections.
Learnership	An enterprise-based training which equip practical skills on learnable occupation or non-apprenticeable occupation and may or may not be supplemented by related theoretical instruction.
Legal aid	This includes legal advice, assistance, and representation for persons detained, arrested or imprisoned, suspected, accused of, or charged with a criminal offence, and for victims and witnesses in the criminal justice process, provided at no cost to those without sufficient means or when the interests of justice requires.
Lifelong learning	All learning activities undertaken throughout life for the development of competencies and qualifications. Adult learning and education, technical-vocational education or training, and literacy are all significant components of the lifelong learning process.
Liquidity	The fact of being available in the form of money, rather than investments of property, or of being able to be changed into money easily. (Cambridge Dictionary)
Local Climate Change Action Plan	An action plan formulated by the LGUs to address climate change concerns. The Local Climate Change Action Plan (LCCAP) focuses on both climate change adaptation and mitigation and describes how the LGUs plan to respond to climate change and mainstream such into local development plans. (DILG-Local Government Academy [LGA], 2017)
Local cultural inventory	This is also known as the Local Inventory of Cultural Property or Local Cultural Database, referring to the inventory of identified tangible and intangible cultural properties being maintained by the LGU, which reveal the identity of its community and provide systematization and information on local cultural heritage.

Local culture and arts councils	The local special body chaired by the local chief executive whose purpose is the promotion of culture and the arts, coordination with government agencies and non-governmental organizations, appropriation of funds for the support and development of said council, implementation of LGU obligations under the National Cultural Heritage Act of 2009, and other related functions prescribed in DILG MC 2017-133.
Local development fund	The 20 percent of the LGU's IRA appropriated for development projects that contribute to the attainment of desirable socioeconomic development and environmental management outcomes of the LGU and partake the nature of investment or capital expenditures. (DILG and DBM JMC 2017-1)
Local investment and incentives code	A document that articulates the local government investment policies and programs, investments priority areas (IPA), and local incentives (fiscal or non-fiscal) available to domestic and foreign investors and the mechanics for availing them.
Local public transport route plan	A plan detailing the route network, mode, and required number of units per mode for delivering public land transport services. This is prepared by the LGUs and approved by the DOTr/Land Transportation Franchising and Regulatory Board (LTFRB). This plan shall serve as the basis of a comprehensive local transport plan. (DOTr, DILG, LTFRB, 2017)
Local shelter plan	A document which provides information on the analysis of the present local housing situation, i.e., identification of housing problems, upgrading and future housing needs, household affordability, and local resources, such as land, provision of basic services, and finances. It also contains the main shelter strategies and a corresponding implementation plan which provides the details of actions needed to realize the housing objectives. (IRR of RA 11201, 2019)
Local university and college	Public education institutions established by the local government through an enabling ordinance, and financially supported and maintained by the local government. (NSCB, 2006)
Logistics hub	Integrated centers for transshipment, storage, collection, and distribution of goods.
Low-cost housing	Housing price ceilings between PHP480,000 to PHP3 million. (Housing and Urban Development Coordinating Council [HUDCC] Resolution 1, s. 2018, HUDCC MC 5, s. 2007, HUDCC MC 4, s. 2006)
Lower middle-income countries	Lower-middle-income economies are those with a 2019 GNI per capita between USD1,036 and USD4,045. (WB)

<i>Lupong Tagapamayapa</i>	A peace-making body organized in every barangay to administer <i>Katarungang Pambarangay</i> and composed of the <i>punong</i> barangay as chairman with no less than 10 or more than 20 members.
Macro-prudential measures	The use of primarily prudential tools to limit systemic risk. A central element is the notion of systemic risk—namely, the risk of widespread disruption to the provision of financial services that is caused by an impairment of all or parts of the financial system, which can cause serious negative consequences for the real economy.
Madrasah	An Arabic term for school defined as a community-based educational institution and operated privately, where the medium of instruction is in Arabic language with Islamic studies and Arabic literacy as the core emphasis. (NSCB, 2006)
Major river basin	River basins with basin area of at least 990 sq.km.
Makerspace	A communal space that contains tools and components in which people with shared interests can gather to work on projects while sharing ideas, equipment, and knowledge. It can be an elaborate learning space equipped with sophisticated tools and supplies or simply a gathering point for tools, projects, mentors, and expertise.
<i>Mandanas</i> Case ruling	The Supreme Court (SC) ruling which declares the phrase “internal revenue” appearing in Article 284 of the Local Government Code unconstitutional, thereby, entitling the LGUs with a national tax allotment computed based on all forms of national tax beginning 2022 and mandating the automatic release of the share of LGUs in the national taxes without the need of yearly appropriation. (Mandanas, et al. v. Ochoa, et al., 2018 and Garcia, Jr. v. Ochoa, et al., 2018)
Mangrove/s	A community of intertidal plants, including all species of trees, shrubs, vines, and herbs, found on coasts, swamps, or border of swamps. (RA 8550, 1998)
Marine protected area/s	A defined area of the sea established and set aside by law, administrative regulation, or any other effective means, in order to conserve and protect a part of an entire enclosed environment through the establishment of management guidelines. It also includes all declared areas governed by specific rules or guidelines in order to protect and manage activities within an enclosed area. (RA 10654, 2015)
Marine protected area network	A group of adjacent individual marine protect areas (MPAs) under a common management system based on all or any of the following: physical, biological, governance, and socioeconomic connectivities. (DENR AO 2016-06).
Maritime Industry Development Plan 2019-2028	A ten-year roadmap which aims to accelerate the achievement of a nationally-integrated and globally-competitive Philippine maritime industry.

Market sharing	An agreement between competitors to restrict their sales to specific geographic areas, effectively creating local monopolies for each of them.
Market-determined /Flexible exchange rate policy	Under the system of freely-floating exchange rates, the value of the foreign currency in terms of the local currency is determined in the interbank foreign exchange market (by the forces of supply and demand just like any commodity or service being sold in the market). This is in contrast to a fixed exchange rate system, in which a par value rate, is set between the local currency and the dollar by the central bank. The par value may be adjusted from time to time.
Master Plan on ASEAN Connectivity 2025	This was adopted on September 6, 2016 in Laos, as a successor document to the Master Plan on ASEAN Connectivity 2010, with the goal of achieving a seamlessly and comprehensively connected and integrated ASEAN. It focuses on five strategic areas namely: sustainable infrastructure, digital innovation, seamless logistics, regulatory excellence, and people mobility.
Materials recovery facility	It includes solid waste transfer station or sorting station, drop-off center, composting facility, and recycling facility. (RA 9003, 2000)
Maternal mortality ratio	The ratio between the number of women, who died (for reasons of pregnancy, childbirth, and puerperium) to the number of reported live births in a given year, expressed as the number of maternal deaths per 100,000 live births.
Mean years of schooling	This refers to the average number of completed years of education of a country's population aged 25 years and older, excluding years spent repeating individual grades. (UNESCO, 2021)
Mediation	A voluntary process, in which a mediator selected by the disputing parties, facilitates communication and negotiation, and assists the parties in reaching a voluntary agreement regarding a dispute.
Metrology	This provides the measurement standards that are internationally traceable and consistent with the Metre Convention, which promotes the consistent modernization of units and standards of measurement in the areas of environment, public health and safety, communications, transportation, sound intensity level, and other emerging technologies. The standardization of units and standards is encouraged to adapt to the current national and global developments including compliance with international standards.
Micro, small, and medium enterprises	This refers to any business activity or enterprise engaged in industry, agribusiness and/or services that has: (a) an asset size (less land) of up to PHP100 million; and (b) an employment size with less than 200 employees. Based on these categories, it is classified as micro, small, or medium regardless of the type of business ownership (i.e., single proprietorship, cooperative, partnership, or corporation).

Microinsurance	An activity providing specific insurance, insurance-like, and other similar products and services that meet the needs of the low-income sector for risk protection and relief against distress, misfortune, and other contingent events. (Insurance Commission [IC], 2017)
Migrant worker	A migrant who is engaged in or has been engaged in a remunerated activity in a state, which he or she is not a legal resident or on board a vessel, navigating the foreign seas other than a government ship used for military or non-commercial purposes or on an installation located offshore or on the high seas. (PSA, 2017)
Migration cycle	These are stages of the migration process encompassing departure, in some cases transit through a State, immigration in the State of destination, and return.
Minimum initial service package for sexual and reproductive health	A set of priority activities to be implemented in emergency situations with the goal of reducing maternal mortalities, morbidities, and disabilities through specific interventions on coordination, prevention of gender based violence, prevention of sexually-transmitted infections/human immunodeficiency virus/acquired immune deficiency syndrome (STI/HIV/AIDS), maternal and neonatal care, and planning for comprehensive reproductive health following the SPHERE standard (project by a group of humanitarian non-governmental organizations and the International Red Cross and Red Crescent Movement that identified minimum standards in key life-saving sectors that must be achieved in any humanitarian response, in order for disaster-affected populations to survive and recover in stable conditions with dignity). When implemented in the early days of an emergency, it can save lives and prevent illnesses, especially among women and girls. (DOH, 2016)
Minus-One Element Technique Application	An android-based app which was developed to complement the soil diagnostic tool—Minus-One Element Technique (MOET) kit. It computes fertilizer recommendations and yield estimates based on the pot-based fertilizer trial to identify significant nutrient elements lacking in the soil. (Philippine Rice Research Institute [PhilRice])
Missionary electrification	The provision of basic electricity service in unviable areas with the aim of bringing the operations in these areas to viability levels.
Mitigation	This refers to, in the context of climate change, human interventions to address anthropogenic emissions by sources and removals by sinks of all greenhouse gas (GHG), including ozone-depleting substances and their substitutes. (RA 9729, 2009)

Modular distance learning	A mode of distance learning that involves individualized instruction using printed or digital self-learning modules and other learning resources like textbooks, activity sheets, study guides, where the teacher takes responsibility for monitoring learner progress and is available to provide assistance to students should they have questions. Family members and other stakeholders serve as para-teachers to supervise/guide learners in accomplishing the modules. (DepEd Basic Education-Learning Continuity Plan [BE-LCP], 2020)
Multimodal	This involves different transport modes on different routes. (Jonuschat, H., Stephan, K., & Schelewsky, M. [2015]. Understanding multimodal and intermodal mobility. <i>In Sustainable Urban Transport</i> . Emerald Group Publishing Limited.)
Municipal fishing	The catching of fish within municipal waters using fishing vessels of three gross tons or less, or fishing not requiring the use of fishing vessels. (RA 8550, 1998)
Municipal waters	Waters that include not only streams, lakes, inland bodies of water, and tidal waters within the municipality, which are not included within the protected areas as defined under RA 7586, public forest, timber lands, forest reserves or fishery reserves, but also marine waters included between two lines drawn perpendicular to the general coastline from points where the boundary lines of the municipality touch the sea at low tide and a third line parallel with the general coastline, including offshore inlands and 15 kms from such coastline. These are two municipalities situated on opposite shores that there is less than 30 kms of marine waters between them, the third line shall be equally distant from opposite shore of the respective municipalities. (RA 8550, 1998)
Mutual Recognition Agreement	These are framework arrangements established in support of liberalizing and facilitating trade in services. Mutual Recognition Agreements (MRAs) aim to facilitate mobility of professionals/skilled labor in ASEAN and work towards the adoption of best practices on standards and qualifications.
National Achievement Test	A standardized test designed to determine students' achievement of learning standards and 21st Century Skills under the K to 12 curriculum and administered to learners in Grades 6, 10, and 12. Results are expressed in the mean percentage score (MPS) and interpreted, in terms of proficiency levels ranging from Highly Proficient (90-100), Proficient (75-89), Nearly Proficient (50-74), Low Proficient (25-49), and Not Proficient (0-24). (DepEd)
National Competition Policy	The National Competition Policy (NCP) is planned to be issued as an EO containing a comprehensive framework that steers regulations and administrative procedures to promote free and fair market competition.

National Integrated Protected Areas System	The classification and administration of all designated protected areas to maintain essential ecological processes and life-support systems, to preserve genetic diversity, ensure sustainable use of resources found therein, and maintain their natural conditions to the greatest extent possible. (RA 7586, 1992)
National Justice Information System	An integrated information system that is intended to address and remedy the current information gaps in the Philippine criminal justice system by enabling effective sharing of data between the police, judiciary, probation services, custodial authorities, and criminal information registries, at key decision points in the criminal justice system process.
National Logistics Masterplan 2017-2022	This serves as a guide for the national government in developing a seamless intermodal logistics corridor and assist in identifying the key transport and logistics bottlenecks. The masterplan envisions to advance Philippine competitiveness through an efficient logistics sector.
National Quality Infrastructure	An institutional framework that establishes and implements the practice of standardization, including conformity assessment services, metrology, and accreditation. (Aquino, 2016)
National Tourism Development Plan 2016-2022	A plan formulated by the Department of Tourism (DOT), as mandated by the Tourism Act of 2009 (RA 9593), which envisions to develop a highly-competitive and environmentally-sustainable tourism industry.
National Transport Policy	<p>This policy was formulated to help achieve the Transport Vision of a “safe, secure, reliable, efficient, integrated, intermodal, affordable, cost-effective, environmentally sustainable, and people-oriented national transport system that ensures improved quality of life of the people. The National Transport Policy (NTP), as embodied in NEDA Board Resolution 5, s. 2017, “Approving the NTP”, was adopted by the NEDA Board on June 27, 2017. It was published in general circulation on February 14, 2018.</p> <p>Pursuant to Section 11 of the NEDA Board Resolution 5, s. 2017, the NEDA Board Committee on Infrastructure (INFRACOM), through the Inter-Agency Technical Committee on Transport Planning (IATCTP), was tasked to formulate and issue the accompanying Implementing Rules and Regulations (IRR) to effectively carry out the provisions of the NTP. The IRR contains the guidelines and methodologies in the operationalization of the strategies and intended policy reforms in the transport sector towards the realization of the Transport Vision. The INFRACOM, during its December 14, 2018 meeting, approved and adopted the NTP IRR (INFRACOM Resolution 01-2018, “Approving the IRR of the NTP”). The IRR was published in general circulation on December 30, 2019. (NEDA, NTP, 2021)</p>

Natural capital accounting	The Natural capital accounting (NCA) is an umbrella term covering efforts to use an accounting framework to provide a systematic way to measure and report on stocks and flows of natural capital. This covers accounting for individual environmental assets or resources, both biotic and abiotic (such as water, minerals, energy, timber, fish), as well as accounting for ecosystem assets (e.g. forests, wetlands), biodiversity, and ecosystem services. (United Nations Statistics Division [UNSD])
Natural floodplains	Land areas adjacent to rivers and streams that are subject to recurring inundation. They provide flood risk reduction benefits by slowing runoff and storing flood water. (Organization of American States, US Homeland Security-Federal Emergency Management Agency, 2020)
Nature-based solutions	This refers to actions to protect, sustainably manage, and restore natural and modified ecosystems that address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits. (IUCN)
<i>Negosyo</i> Center	A One-Stop Shop for services that caters to entrepreneurs' need in processing requirements to establish a business and in accessing information essential for their growth.
Neonatal mortality rate	The number of deaths within the first month of life per 1,000 live births.
Net enrolment rate	The ratio of the enrolment for the age group corresponding to the official school age in the elementary/secondary level to the population of the same age group in a given year. (NSCB, 2006)
New Normal	In general, the new normal will be characterized by the need to observe social distance and strict personal hygiene and other sanitation protocols. There may still be sporadic lockdowns, though over a smaller geographic unit. At the same time, the COVID-19 threat looms large in the minds of individuals—consumers and business alike. This general context has far-reaching implications across the different dimensions: political, economic, social, technological, legal, and environmental. (NEDA, We Recover As One Report, 2020)
Niche Centers in the Regions for R&D Program	This aims to address the discrepancy in access to R&D funding among the regions. Through the program, qualified higher education institutions (HEIs) in the regions are provided with grants so they can undertake quality research directed at promoting regional development with their existing capabilities and resources. A proposed Niche Centers in the Regions (NICER) should be unique, a collaborative project between HEIs, and must be duly endorsed by the Regional Development Council (RDC) to ensure its socioeconomic impact in the region. (Science for Change Program Website)

Night-rating	A qualification that allows a pilot to fly an aircraft during the time of ‘night’ as qualified by the International Civil Aviation Organization (ICAO), being the time from 30 minutes after sunset to 30 minutes before sunrise and in Visual Meteorological Conditions (VMC). (European Pilot Academy)
Non-communicable disease	This is also known as chronic diseases. Non-communicable diseases (NCDs) are diseases not passed from person to person. They are of long duration and generally slow progression. The four main types of NCDs are cardiovascular diseases (like heart attacks and stroke), cancers, chronic respiratory diseases (such as chronic obstructive pulmonary disease and asthma), and diabetes.
Non-motorized transport	The movement of people and goods propelled by human power only such as walking and cycling. (Land Transportation Office [LTO] MC 2020-2185, 2020)
Normalization	A process whereby communities can achieve their desired quality of life, which includes the pursuit of sustainable livelihood and political participation within a peaceful, deliberative society. (Framework Agreement on the Bangsamoro, Annex on Normalization)
Off-grid areas	These are areas not connected to the wires and related facilities of the Grid System of the Philippines.
Official Development Assistance	A loan or a grant administered to promote sustainable social and economic development and welfare of the Philippines. (Official Development Assistance [ODA] Act of 1996 [RA 8182])
OneExpert	An interactive web-based nationwide pool of science and technology (S&T) experts. It intends to improve access to experts and technologies particularly by people living outside of the major urban centers where most research and technical institutions are located. In the same manner, OneExpert will likewise bring the services of any accredited expert located anywhere in the Philippines to clients that need S&T assistance. (OneExpert Website)
OneLab	A network of laboratories aimed at ensuring availability and broadening public access to testing and calibration services at a single touchpoint through an IT-based platform. OneLab uniquely facilitates seamless laboratory transaction from sample receipt to test result as facilitated by the OneLab Referral System. With this efficient system, the fastest turn-around time and expanded test offerings in the market can be obtained. (OneLab Website)
Open Access (Energy)	This refers to the system of allowing any qualified person the use of transmission and/or distribution system and associated facilities subject to the payment of transmission and/or distribution retail wheeling rates duly approved by the Energy Regulatory Commission (ERC).

Open Budget Index	<p>A part of the Open Budget Survey, which is a comprehensive analysis and survey that evaluates whether governments give the public access to budget information and opportunities to participate in the budget process at the national level. (International Budget Partnership, 2011)</p> <p>This index is developed by the International Budget Partnership and updated every two years.</p>
Open distance learning	<p>A system which combines the methodology of distance education with the concepts of open learning and flexible learning. Open learning refers to a philosophy of learning that is based on flexibility of access for equity in education, an educational system accessible to every individual with minimal restrictions, and emphasizing the flexibility of the system to eradicate problems caused by barriers like age, geographical location, time constraints, and economic situation.</p> <p>Distance education is a mode of learning in which students and teachers are physically separated from each other. It is student-centered, guided independent study, making use of well-studied teaching and learning pedagogies to deliver well-designed learning materials in various media. It is also sometimes described as flexible learning and distributed learning. (RA 10650, 2014)</p>
Operational relief measures for FX transactions	<p>These are measures that ensure that BSP stakeholders have continued access to FX resources of the banking system.</p>
Organic agriculture	<p>This includes all agricultural systems that promote the ecologically sound, socially acceptable, economically viable and technically feasible production of food and fibers. Organic agriculture dramatically reduces external inputs by refraining from the use of chemical fertilizers, pesticides, and pharmaceuticals. (Organic Agriculture Act of 2010 [RA 10068])</p>
Output limitation	<p>An agreement between competitors to prevent or restrict the volume of particular goods or services available on the market to manipulate prices.</p>
Overseas Filipino workers	<p>Filipino migrant workers whether regular or irregular. (PSA, 2017)</p>
Overseas Filipinos	<p>Filipinos who are living outside of the Philippines. (PSA, 2017)</p>
<i>Palayamanan</i>	<p>A model of diversified integrated rice-based farming system developed and established by PhilRice, which is composed of synergistically compatible farming ventures such as rice, onion, poultry, livestock, and aquaculture. (PhilRice)</p>

Palliative care	An approach that improves the quality of life of patients and their families facing the problem associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial, and spiritual.
Participatory governance	Sometimes called participatory democracy, it refers to forms of governance in which citizens and other non-state actors, are empowered to influence and share control in processes of public decision-making that affect their lives. (Coghlan and Brydon-Miller, 2014)
Patent	A grant issued by the government through the IPOPHIL. It is an exclusive right granted for a product, process, or an improvement of a product or process which is new, inventive, and useful. This exclusive right gives the inventor the right to exclude others from making, using, or selling the product of his invention during the life of the patent.
Patent Cooperation Treaty	An agreement for international cooperation in the filing, searching, and examination of patent applications and the dissemination of information contained in the applications. The treaty implements the concept of filing a single international patent application, which will have a legal effect of filing, in the different countries bound by the treaty.
Percentage of youth not in education and employment	This refers to the total unemployed youth (15-24 years old), who are not currently attending school plus total youth not in the labor force who are not currently attending school, as a percentage share of total youth household population. (PSA metadata, 2018)
Permanent overseas Filipinos	Overseas Filipinos (OFs), including their descendants, with permanent residence abroad. These are also Filipinos abroad with dual citizenship status. (PSA, 2017)
Personal Property Security Act	The enactment of the Personal Property Security Act of 2018 (RA 11057), grants small businesses, particularly MSMEs, farmers, and fisherfolk, greater access to credit by allowing the use of non-traditional collaterals, such as accounts receivables, inventory, crops, livestock, consumer goods, machinery, equipment, and intellectual property rights, among others. This will be done by establishing a unified and modern legal framework for securing obligations with personal property
Personal protective equipment	Specialized clothing or equipment designed to protect workers against safety and health hazards that may cause serious workplace injuries and illnesses.
Persons deprived of liberty	Detainees who are incarcerated pending trial and/or final judgment. It includes all persons who are arrested, detained, imprisoned, or otherwise under custody of government authorities.

Philippine Identification System	A single national identification system for all citizens and resident aliens of the Republic of the Philippines to promote seamless delivery of service, improve efficiency, transparency, and targeted delivery of public and social services, enhance administrative governance, reduce corruption and curtail bureaucratic red tape to avert fraudulent transactions and misrepresentations to strengthen financial inclusion, and promote EODB. (RA 11055, Section 2)
Philippine Inclusive Innovation and Industrial Strategies	The Philippine Inclusive Innovation and Industrial Strategies (i3S) aims to grow and develop globally-competitive and innovative industries with innovation at the front and center of industrial policies and programs supported by pillars consisting of building new industries, clusters, and agglomeration. These will also ensure MSME growth and development, human resource development, and improving EODB and the business environment.
Philippine Innovation Act	The Philippine Innovation Act of 2019 (RA 11293) mandates the creation of the National Innovation Council (NIC) that will steer the whole-of-government coordination and collaboration and remove the fragmentation in the country's innovation governance.
Philippine Innovative Startup Act of 2019	This act aims to strengthen, promote, and develop the Philippine startup ecosystem by allowing startups and enablers to enjoy privileges, making it easier for them to run their startups. It will also provide opportunities for entrepreneurs with innovative ideas to gain access to capacity-building exchange programs and link them to potential investors, collaborators, and markets, both local and overseas.
Philippine National Trade Repository	A web-based portal that provides a single source of comprehensive, accurate, and up-to-date information on all trade related matters.
Philippine Qualifications Framework	A national policy which describes the levels of educational qualifications and sets standards for the outcomes of education and training, specializations, skills, and competencies. It is a quality-assured national system for the development, recognition, and award of qualifications based on standards of knowledge, skills, and values acquired in different ways and methods by learners and workers of the country. It supports the development and maintenance of pathways and equivalencies which provide access to qualifications.
Philippine Railway Training Center	An institution accredited by the TESDA that offers TVET courses under TESDA and CHED.

Philippine Startup Development Program	This program supports startups from the formation of ideas, product development, to marketing and expansion. The DICT, DOST, and DTI are authorized to provide the following benefits and incentives to startups and startup enablers who have passed the selection and application process.
PM 10	Particulate Matter (PM) with less than 10 micrometers in diameter. (RA 8749, 1991)
PM 2.5	PM with less than 2.5 micrometers in diameter. (RA 8749, 1991)
Portfolio investment	A category of crossborder transactions and positions involving debt or equity securities, other than those included in direct investment or reserve assets.
Potential irrigable area	An arable land area of the country that can be developed for irrigation, relatively flat from 0-3 percent slope rate, has an available source of water to sustain irrigation delivery for crop production and other agricultural purposes and has farmers willing to till the land and raise crops there. (NIA)
Poverty incidence	The proportion of families/individuals with per capita income/expenditure less than the per capita poverty threshold to the total number of families/individuals. (PSA)
Precarious work	This refers to workers whose nature of employment is short-term or seasonal or casual or those who worked for different employers on day-to-day or week-to-week basis.
Preferential market access	Privilege granted to parties to a trade agreement often allowing for reduced tariffs for specific commodities.
Price fixing	An agreement between competitors to collude with one another to fix prices for goods and services, rather than allowing prices to be determined by market forces.
Primary energy supply	This refers to energy production plus energy imports, minus energy exports, minus international bunkers, then plus or minus stock changes
Primary expenditures	Disbursements of the government excluding the interest payments on the debt.
Principal river basin	River basins whose basin area is at least 40 sq.km.
Production forest	Forest lands that can be made available for timber and agroforestry production, range lands for grazing, and other forest lands special uses. (Philippine Official Reference for Forest-Related Terms and Definitions)

Production network	The nexus of interconnected functions, operations, and transactions through which a specific product or service is produced, distributed and consumed.
Productivity toolbox	A package of training and technical assistance services designed to help MSMEs identify and address productivity gaps through appropriate and needs-based productivity tools and technologies. It also helps MSMEs design and implement productivity-based incentive schemes to ensure growth in workers' income commensurate to their productivity.
Project repeal	An initiative spearheaded by the National Competitiveness Council (NCC) geared towards eliminating red tape by systematically removing redundant and burdensome policies in government agencies.
Protected areas	These are identified portions of land and water set aside by reason of their unique physical and biological significance, managed to enhance biological diversity, and protected against destructive human exploitation.
Protection forest	An area wholly or partly covered with woody vegetation managed primarily for its beneficial effects on water, climate, soil, aesthetic value, and preservation of genetic diversity. (DENR AO No. 1995-15)
Protectionism	Policy of protecting domestic industries against foreign competition by means of tariffs, subsidies, import quotas, or other restrictions or handicaps placed on the imports of foreign competitors. (Britannica)
Public Financial Management	Set of laws, rules, systems, and processes used by the government in resource mobilization and expenditure management. It is how the government raises its income (in the form of taxes, customs duties, and other revenues) and manages its expenditures to deliver essential services to its citizens in various areas (i.e., education, health care and other social programs, roads and infrastructure, the rule of law and security).
Public rental housing	Government-owned structures in the form of medium rise walk-up apartments or single-structure buildings called tenements built specifically for rent to low-income households.
Public-private partnership	Broadly defined as a contractual agreement between the government and a private firm targeted towards financing, designing, implementing, and operating infrastructure facilities and services that were traditionally provided by the public sector.
Qualified third parties	This refers to private sector providers of electric service in remote and unviable areas not served by the franchised utility.

Quantitative restriction	Specific limits imposed on the volume or value of goods traded by a member of the WTO. The General Agreement on Tariffs and Trade (GATT) requires the general elimination of these restrictions except in defined circumstances. (WTO)
Research and Development Expenditure	Defined based on the “accrual” approach as expense or cost incurred by a particular R&D institution or unit in implementing the R&D project/activity during a specific reference period. It includes all expenses or costs that are paid/payable/committed/obligated, whatever the source of funds. R&D expenditures are classified into: personal services, maintenance and other operating expenses, and capital outlay. (DOST, 2015)
Research and Development Leadership Program	This aims to help develop and strengthen further the research capabilities of the academe, research and development institutions (RDIs), and other government line agencies nationwide. To this end, RDLeaders who are local S&T experts with strong leadership and innovative policy proficiencies are engaged to train, and direct and support their R&D goals. Depending on the R&D needs of the academe, RDIs, and line agencies, an RDLeader is engaged through application, screening, and evaluation by the National Research Council of the Philippines (NRCP). The NRCP is the implementing agency of the R&D Leadership (RDLead) Program. (Science for Change Program)
Radicalization	A process through which an individual adopts an increasingly extremist set of beliefs and aspirations. This may include, but is not defined by, the willingness to condone, support, facilitate, or use violence to further political, ideological, religious, or other goals. (UNODC)
Rainwater harvesting	A water harvesting technique which harvests runoffs or ground surfaces used productive purposes.
Rapid land tenure appraisal	The process to obtain a clear picture of the land tenure situation on the ground before land titling operations are entered into the area. It is intended to determine the approximate workable lots in a particular area. (DENR-Land Management Bureau [LMB] Technical Bulletin 1, s. 2018)
Rediscounting facilities	A credit facility to augment funds needed by wholesale borrowers, where availments on the rediscounting line are made against promissory notes of sub-borrowers. It includes not only those project/business-based enterprises but also those for eligible salary-based general purpose consumption loans.
Reenacted budget	This means that if by the end of any fiscal year, the Congress fails to pass the General Appropriations Bill (GAB) for the ensuing year, the General Appropriations Act (GAA) for the preceding year shall be deemed reenacted and shall remain in force and in effect until the GAB is passed by the Congress. (1987 Constitution)

Regional Inclusive Innovation Centers	A network of innovation agents that collaborate to commercialize market-oriented research towards the competitiveness of the region, which aims to generate better employment opportunities, more entrepreneurial activities, and sustainable economic prosperity in the country's regions. These innovation agents include: industries, universities, government agencies, LGUs, startups, MSMEs, R&D laboratories, S&T parks, incubators, FabLabs, investors, among many other agents in the ecosystem. (DTI)
Registry System for Basic Sectors in Agriculture	A nationwide database of baseline information of farmers, farm laborers, and fisherfolk from identified provinces, as well as geographical coordinates of agricultural and fishery workers' households. These data shall be used as basis for developing programs and policies for the agriculture and fishery sectors.
Regular Foreign Investment Negative List	The Regular Foreign Investment Negative List (RFINL) identifies and provides local and foreign investors, as well as regulators, a clear guide on the investment activities/areas that are open to foreign investors and the extent of foreign equity participation allowed therein. This is formulated every two years by virtue of the Foreign Investments Act of 1991 (RA 7042) as amended by RA 8179.
Regulatory Impact Assessment	A tool to design and evaluate policies, laws, and regulations that are targeted, proportionate, accountable, transparent, and consistent. It involves a systematic process that examines the expected consequences of a range of alternative policy options that could be used to address a particular policy problem or issue. The policy options shall include evidence-based information to decision-makers, regulators, and stakeholders. (JMC 2019-001 IRR of RA 11032, Section 4)
Regulatory quality	A sub-indicator of the WB's Worldwide Governance Indicators. This indicator reflects perceptions of the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development. (Kaufmann, Kraay, and Mastruzzi, 2010)
Regulatory sandbox	A testing ground for emerging industries that requires a high degree of regulatory flexibility, market openness, and a competitive policy environment. Further, supporting the growth of emerging industries may spur innovation but may also cause disruption to traditional sectors.
Reintegration	A holistic process by which a migrant, on her/his own or with the assistance of government and other duty bearers (private sector, development non-government organizations [NGOs], or organizations), returns to her/his home of origin for good, by intention, through a series of preparations and interventions geared towards her/his specific needs, goals, interests, potentials and capacities. (OWWA-National Reintegration Center For OFWs' [NRCO] definition as presented in the SCIMD Meeting, June 11, 2021)

Remittance flows	These include the entire spectrum of cross-border remittance and resource flows (current and capital transfers in cash and kind), including migrants' and short-term employee income transfers (personal remittances), acquired rights in social benefits (total remittances), and bilateral aid programs (both private and public) to non-profit organizations.
Renewable energy	This refers to energy resources that do not have an upper limit on the total quantity to be used. Such resources are renewable on a regular basis, and whose renewal rate is relatively rapid to consider availability over an indefinite period of time. These include, among others, biomass, solar, wind, geothermal, ocean energy, and hydropower.
Repatriation	This refers to bringing distressed workers back to the Philippines. It includes, airport assistance, temporary shelter at the OWWA Halfway House, and provision for their travel back to their provinces.
Repo (Repurchase) facility	A facility where the buyer (BSP) purchases securities from a seller (bank) with a commitment to sell the securities back at a specified future date at a pre-determined rate. In the case of the BSP, this causes liquidity to expand. Conversely, a reverse repurchase facility causes liquidity to contract if used by the BSP.
Report card survey	An evaluation, formerly implemented by the CSC and now under the Anti-Red Tape Authority (ARTA), to obtain feedback on how provisions in the Citizen's Charter are being followed and how the agency is performing. This evaluation also includes estimates of hidden costs incurred by clients to access frontline services, which may include, but are not limited to, bribes and payment to fixers. (RA 11032, Section 20)
Research and Development	Defined as comprising creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture, and society, and the use of this stock of knowledge to devise new applications. This definition is based on UNESCO and OECD. The basic criterion to distinguish R&D from related activities is the presence of an appreciable element of novelty and the resolution of scientific and/or technological uncertainty, i.e., when the solution to a problem is not readily apparent to someone familiar with the basic stock of common knowledge and techniques for the area concerned. (OECD Frascati Manual, 2002)
Resiliency or resilience	The capacity of social, economic, and environmental systems to cope with a hazardous event or trend disturbance, responding, or reorganizing in ways that maintain their essential function, identity, and structure, while also maintaining the capacity for adaptation, learning, and transformation. (IPCC, 2014)

Results-Based Performance Management System	This serves as single performance management system for the whole of the Executive Branch, in place of the multiple and disparate performance management systems that are currently being implemented. This seeks to rationalize, harmonize, streamline, simplify, integrate, and unify the performance management systems and activities of oversight government agencies. (Results-Based Performance Management System [RBPMS])
Revised Corporation Code of the Philippines	This is also known as RA 11232, which eliminates barriers to entry of both small and large enterprises by permitting the formation of one-person corporations, and allowing stockholders or members to exercise their rights through remote communication and in-absentia voting, among others.
Rice Competitiveness Enhancement Fund	The tariff collected from imported rice which shall be used to help rice farmers become competitive and more productive. It consist of (a) an annual appropriation of PHP10 billion for six years to fund programs on farm mechanization, seed development, propagation and promotion, credit assistance, and extension services, which were specifically identified to improve the productivity of rice farmers, reduce production cost and link them to the value chain; and (b) the excess from the PHP10 billion tariff revenue collection, which will still be given to rice farmers and appropriated by the Congress the following year, for the direct financial assistance for rice farmers, titling of agricultural rice lands, expanded crop insurance program, and crop diversification program. (Rice Tariffication Law [RA 11203], 2019)
Rice Crop Manager	A decision support tool that provides a farmer with a personalized crop management recommendation after the farmer answers a series of questions. It is intended for irrigated and rainfed rice grown in farm lots surrounded by bunds. Based on research trials, the Rice Crop Manager (RCM) can increase yields and added net benefit when farm lots normally yield below 7 tons/hectare (ha) at 14 percent moisture. Benefit from RCM could be very small or negligible for farm lots with normal yield of 7 tons/ha and above at 14 percent moisture.,(IRRI)
Riparian buffer strips	Strip of vegetation along the bank of a stream or river that spatially separates more developed land from water. Buffers help provide shade, protect water from human land use practices, and control erosion. Plants used in buffers can include various grasses, forbs, shrubs, and trees. (IPC, 2019)
River basin	An area of land that drains water, sediment, and dissolved materials to a common outlet at some point along the river and/or stream channel. Principal river basins are those with basin areas of at least 40 sq.km., while major river basins are those with basin areas of at least 990 sq.km.

Roll-on-Roll-off	A modern cargo handling technique first introduced in the 1950s, in which vessels are used to carry wheeled cargo. Rolling stock is ready for delivery upon arrival at the discharge port, and loading, stowing, and discharge operations are simplified. This method is used on board many ships, such as roll-on-roll-off (RORO) freight ferries, multipurpose RORO carriers, car carriers, rail/vehicle ferries, and car/passenger ferries.
Route rationalization	Route rationalization determines the appropriate mode, quantity and service characteristics of the public transport service in each corridor ,which will make the routes more responsive to passenger demand and ensure that the hierarchy of roads and modes of transportation, are followed. (LTFRB, 2021)
Rule of law	A principle of governance, in which all persons, institutions and entities, public and private, including the state itself, are accountable to laws.
Safe and potable water supply	This refers to the water accessed through a pipe system into dwellings, yards, or plots, through public tap and through protected wells.
Sanitary and phytosanitary protocols	Measures applied to protect animal or plant life or health within the territory from risks arising from additives, contaminants, toxins, or disease-causing organisms in foods, beverages, or feedstuffs; or from the entry, establishment or spread of pests, diseases, disease-carrying organisms, or disease-causing organisms.
Sanitary landfill	A waste disposal site designed, constructed, operated, and maintained in a manner that exerts engineering control over significant potential environmental impacts arising from the development and operation of the facility. (RA 9003, 2000)
Science	A system of knowledge that is concerned with the physical and natural world and its phenomena and works to unveil general truths and the operations of fundamental natural laws. Producing scientific knowledge requires unbiased observations and systematic experimentation using the scientific method. (UNCTAD, 2019)
Science for Change Program	This program was created to accelerate science, technology, and innovation (STI) in the country, in order to keep up with the developments of our time wherein technology and innovation are game changers. Through the Science for Change Program (S4CP), the DOST can significantly accelerate STI in the country and create a massive increase in investment on S&T Human Resource Development and R&D B14. (DOST, S4CP)
Seal of Good Local Governance	An award, incentive, honor, and recognition-based program for all LGUs and a continuing commitment for LGUs to continually progress and improve their performance. (RA 11292, Section 3)

Security of tenure	The degree of protection afforded to qualified program beneficiaries against infringement or unjust, reasonable, and arbitrary eviction or disposition, by virtue of the right of ownership, which may come in the form of lease agreement, usufruct, or other contractual arrangements.
Seed development	The process by which seeds are formed from the end of fertilization to the production of a mature seed body. (Nature)
Septage	Sludge produced on individual onsite wastewater disposal systems, mainly septic tanks and cesspools. (RA 9275, 2004)
Septage management	This refers to the provision of proper collection, treatment, and disposal of septage.
Serosurvey	Serological survey in which serum specimens are collected from selected populations over a specified period of time and tested for antibodies against a given infectious pathogen, as an indicator for immunity.
Sewerage	This refers to any system or network of pipelines, ditches, channels, or conduits including pumping stations, lift stations, and force mains, service connections including other constructions, devices, or appliances appurtenant thereof, which includes the collection, transport, pumping, and treatment of water-borne human or animal waste removed from residences, buildings, institutions, industrial, and commercial establishments to point of disposal.
Shared Service Facilities	This aims to improve the competitiveness of MSMEs by providing them with machinery, equipment, tools, systems, skills, and knowledge under a shared system.
Single Carpeta System	An integrated database of inmate information management for Bureau of Jail Management and Penology (BJMP), Board of Pardons and Parole (BPP), and Parole and Probation Administration (PPA). The system will serve as an exchange portal among the three agencies with the Inmate Management Information System of the Bureau of Corrections (BUCOR).
Small Enterprise Technology Upgrading Program	The DOST's nationwide strategy encouraging and assisting MSMEs to adopt technological innovations to improve their products, services, and operations and increase their productivity and competitiveness.
Small farmer	Farmers cultivating not more than three hectares of land; landless farm workers with primary occupation in agriculture; or those engaged as backyard poultry/livestock raisers. In case of combination of these activities, the primary source of income will serve as the basis.

Small fisherfolk	Fisherfolk who are: (a) operating fishing vessels of not more than three gross tons capacity; (b) operating fishponds of less than five hectares or fish cages/pens of less than 400 square meters; or (c) fish workers in fishing boats, fishponds, fish processing and allied establishments, and gleaning activities.
Small Power Utilities Group	The functional unit of the National Power Corporation (NAPOCOR) created to pursue missionary electrification function.
Small Scale Irrigation Systems	Type of irrigation system with limited service areas, constructed in locations where permanent or continuous water sources are not available, and in which farmers have the control and management of the water abstraction from its source and using a level of technology which the farmers can effectively operate and maintain. It refers to a wide range of irrigation infrastructures with various water resources development approaches such as Small Water Impounding Project (SWIP), Small Farm Reservoir (SFR), Diversion Dam (DD), Pump Irrigation System from Open Sources (PISOS) and Shallow Tubewell (STW). (DA-BSWM National Master Plan for SSIP 2014-2022; DA-BSWM, 2014, as used in PDP 2017-2022)
Small-scale mining	Mining activities which rely heavily on manual labor using simple implements and methods and do not use explosives or heavy mining equipment (RA 7076, 1991)
Smart city	A city that connects people, information, and city elements to develop urban centers that are sustainable, inclusive, greener, competitive, innovative, and resilient by using all available technologies and resources in an intelligent and coordinated manner to provide basic public services and ensure livability. (Albino, et.al., 2015; Nam & Pardo, 2011; ADB, 2021)
Smart Industry Readiness Index	The DTI aims to develop a Smart Industry Readiness Index (SIRI) for the country. This was developed in Singapore as the first self-diagnostic Industry 4.0 tool that helps companies globally—regardless of size and industry—determine how to start, scale and sustain their Industry 4.0 transformation. The tool serves as a benchmark for manufacturers to assess and compare their Industry 4.0 maturity levels against those of their peers in the same industry.
Social capital	A measure of how cohesive a society is in terms of the strength of community and family networks therein, and the level of trust and respect people have for each other and for institutions.
Social cohesion	A state of affairs between and among members of the community and between citizens and their government, where they are bound together by norms, values, practices, and relationships, characterized by respect for diversity, culture of peace, cooperation, and trust.

Social enterprise	A business with primarily social objectives, whose surpluses are principally reinvested for that purpose in the business or in the community, rather than being driven by the need to maximize profit for shareholders and owners.
Socialized housing	<p>Housing units costing up to PHP480,000 for 22 sq.m. with loft of at least 50 percent of the base structure, or 24 sq.m.; or up to PHP530,000 for 24 sq. m with loft of at least 50 percent of the base structure, or 28 sq.m.; or up to PHP 580,000 for 28 sq.m. with loft of at least 50% of the base structure, or 32 sq.m. (HUDCC Resolution 1 s. 2018)</p> <p>For socialized condominium units, its cost is up to PHP700,000 for a 22 sq.m. or PHP750,000 for a 24 sq.m. unit located in the National Capital Region, San Jose Del Monte City in Bulacan Province, Cainta and Antipolo City in Rizal Province; San Pedro City in Laguna; Carmona and the cities of Imus and Bacoor in Cavite Province. For other areas, a socialized condominium unit costs PHP 600,000 for a 22 sq.m. or PHP650,000 for a 24 sq.m. (HUDCC Resolution 2, s. 2018)</p>
Solid waste	All discarded household, commercial waste, non-hazardous institutional and industrial waste, street sweepings, construction debris, agricultural waste, and other non-hazardous/non-toxic solid waste.
Solid Waste Management	Discipline associated with the control of generation, storage, collection, transfer and transport, processing, and disposal of solid wastes in a manner that is in accord with the best principles of public health, economics, engineering, conservation, aesthetics, and other environmental considerations, and that is also responsive to public attitudes.
Space technology	The technology that is related to entering and retrieving objects or life forms from space. Technologies such as weather forecasting, remote sensing, Global Positioning System (GPS), satellite television, and some long distance communication systems critically rely on space infrastructures.
Special education	The education of persons who are gifted or talented and those who have physical, mental, or sensory impairment and cultural differences that require modifications of school curricula, programs and special services, and physical facilities to develop them to their maximum capabilities. (NSCB, 2006)
Special Education Fund	This provides the source of funds for the supplementary annual budgetary needs for the operation and maintenance of public schools within the province, city, or municipality through an annual Special Education Fund Budget. (DepEd, DILG, and DBM Joint Circular 1, s. 2017)

Standard	A document approved by a recognized body that provides for common and repeated use, rules, guidelines, or characteristics for products or related processes and production methods, in which compliance is not mandatory. It may also include or deal inclusively with terminology, symbols, packaging, marking, or labelling requirements as they apply to a product, process, or production method.
Standardization	The activity of establishing provisions for common and repeated use in order to achieve the optimum degree of order in a given context. Said provisions, otherwise known as standards, are developed, adopted, and updated, which permits innovation and technical development, compatibility and interchangeability, improved productivity, and reduced waste.
State university and college	Public HEI in the Philippines with independent separate Governing Boards established by national laws which constitute their individual charters and financed and maintained by the national government. (NSCB, 2006)
Stranded contract costs	The excess of the contracted cost of electricity under eligible contracts over the actual selling price of the contracted energy output of such contracts in the market, which contracts shall have been approved by the Energy Regulatory Board as of December 31, 2000. (RA 9136, 2001)
Stranded debts	Any financial obligations of NAPOCOR which have not been liquidated by the proceeds from the sales and privatization of NAPOCOR assets. (RA 9136, 2001)
Strategic Investment Priority Plan	Represents the country's investment plan containing not only the list of priority industries but also investment promotion and facilitation activities for all investment promotion agencies (IPAs). The plan is valid for three years and subject to review and amendment every three years. The BOI in coordination with the Fiscal Incentives Review Board (FIRB), IPAs, other government agencies administering tax incentives, and the private sector are tasked to formulate the Strategic Investment Priority Plan (SIPP).
Stunting	A state in which a child, as a result of inadequate diet in the past, is small or short for his or her age and for his or her genetic stock
Subsistence incidence	Proportion of the population with per capita income less than the per capita food threshold. (PSA)

Supply chain financing	Provides funded and unfunded risk participations and guarantees through ADB's partner financial institutions (PFIs), as well as by direct loans by ADB to obligors, to enhance the access of SMEs to working capital for supply chains. The supply chain financing (SCF) aims to broaden private sector support for supply chain finance, improve cash flow to companies to enable growth and job creation, allow companies traditionally not considered bankable to receive financing, and produce a demonstration effect that encourages financial institutions to undertake more supply chain financing.
Supreme Court ruling on the <i>Mandanas</i> Case	The SC ruled that all collections of national taxes, except those accruing to special purpose funds and special allotments for the utilization and development of the national wealth, should be included in the computation of the base of the just share of local government units. (EO 138, s. 2021)
Surety cover	In the context of implementing the Credit Surety Fund (CSF), issuing a surety cover is meant to secure loans of qualified MSME and cooperative/NGO borrowers in lieu of hard collaterals. This is one of the tools being utilized by the government to enhance MSME's access to finance.
Sustainability Incentive Program	The policy anchored on the Philippine Green Jobs Act of 2016, with the state providing incentives in a range of industries that produce goods or render services for the benefit of the environment, conserve natural resources for future generation, and ensure sustainable development and transition of the country into a green economy.
Sustainable Consumption and Production	<p>A holistic approach in minimizing the negative environmental impacts from consumption and production systems while promoting quality of life for all. (UN Environment Programme [UNEP], 2011)</p> <p>The use of services and related products which respond to basic needs and bring a better quality of life while minimizing the use of natural resources and toxic materials, as well as the emissions of waste and pollutants over the life cycle of the service or product so as not to jeopardize the needs of future generations.</p>
Sustainable development	Development that meets the needs of the present without compromising the ability of future generations to meet their own needs. (Brundtland Commission Report, 1987)
Sustainable land management	The use and management of land resources—soil, water, animals and plants—for the production of goods to meet changing human needs, while ensuring the long-term productive potential of these resources and maintenance of environmental functions. (FAO)

Systemic risk	The potential loss or damage to an entire system as contrasted with the loss to a single unit of that system. Systemic risks are exacerbated by interdependencies among the units often because of weak links in the system. These risks can be triggered by sudden events or built up over time with the impact often being large and possibly catastrophic. (WEF, 2010)
Task Force <i>Katarungan at Kalayaan</i>	A task force composed of justice sector agencies mandated to track and keep a record of the progress of criminal cases of all detained persons within its jurisdiction and ensure that such persons are accorded the rights and privileges provided by law, the rules, and the guidelines. It shall have access to all case records and information relating to detained persons and shall advise the judges hearing their cases, when warranted, of the need for them to act on any incident or situation that adversely affects the rights of detained persons or subjects them to undue or harsh treatment.
Technical Vocational Education and Training	The education process designed at secondary and lower tertiary levels, officially recognized as nondegree programs aimed at preparing technicians, para-professionals and other categories of middle-level workers by providing them with a broad range of education, theoretical, scientific, artistic and technological studies, social services, and related jobs skills training. (NSCB, 2006)
Technology	The systematic theoretical and practical knowledge and skill used in the process of production or service delivery. Technology is not a finished product or service. Technology includes the entrepreneurial expertise and professional know-how needed to deliver products and services. (UNCTAD, 2019)
Technology Business Incubation	A specific type of business incubator—a property-based venture that provides tangible and intangible services to new technology-based firms, entrepreneurs, and spin-offs of universities and large firms, all with the aim of helping them increase their chances of survival and generate wealth and jobs and diffuse technology.
Technology Business Incubation 4.0	This aims to upgrade the capabilities of the agency’s technology business incubation network that would set off the “internationalization” of the Philippine Technology Business Incubators (TBIs).
Technology startups	Tech-based startups specialize in providing products and services through the mix of existing business activities with new ICT tools, resulting in reduced costs and greater efficiency.
Technology transfer agreement	This refers to the process by which one party systematically transfers to another party the knowledge for the manufacture of a product, the application of a process, or rendering of a service, which may involve the transfer, assignment, or licensing of intellectual property rights as defined in the Philippine Technology Transfer Act of 2009 (RA 10055).

Technopreneur	A new age entrepreneur who makes use of technology to come out with something new to make some innovation. Once the person succeeds in it, he exploits his achievement in the market to make money.
Technopreneurship	Entrepreneurship in a technology intensive context. It is a process of merging technological prowess and entrepreneurial talent and skills.
Telemedicine	The delivery of health care services, where distance is a critical factor, by all health care professionals using information and communication technologies for the exchange of valid information for diagnosis, treatment and prevention of disease and injuries, research and evaluation, and for the continuing education of health care providers, all in the interests of advancing the health of individuals and their communities.
Temporary overseas Filipinos	OFs who temporarily stay overseas for employment or non-employment purposes. Temporary may be classified in terms of intention to stay. It also includes students, OFWs, and missionaries. (PSA, 2017)
Terms-of-trade	Ratio between export prices and import prices.
Three-Year Rolling Infrastructure Program	The document containing the pipeline of strategic and other projects needed to sustain inclusive economic growth aimed to synchronize the infrastructure planning, programming and budgeting, and execution processes of the government both at the oversight and implementing agency level.
Trade protectionism	Economic policies that limit or reduce international trade to protect domestic industries. These include subsidies, tariffs, quotas, currency manipulation, and other restrictions.
TradeLine	Business intelligence platform that aims to deliver timely and relevant information and assistance to existing and potential exporters to enhance their capabilities and competitiveness as suppliers of quality goods and services to global markets.
TradeNet	An interoperable platform that facilitates processing of licensing, permit, clearance, and certification regulatory agencies.
TradeNet Portal	The country's gateway for trade facilitation, which provides automated licensing, permit, clearance, and certification system with regulatory agencies, integrated into one internet-based platform.
Traffic engineering	A discipline which includes the design of highways and pedestrian ways, the study and application of traffic statistics, and the environmental aspects of the transportation of goods and people.

Traffic management	The direction, control, and supervision of all functions incident to the procurement and use of freight and passenger transportation services.
Transitional justice	A full range of processes and mechanisms associated with a society's attempt to come to terms with a legacy of large-scale abuses committed in the past, in order to achieve accountability, serve justice, and achieve reconciliation. (Report of the Transitional Justice and Reconciliation Commission)
Transmission (Energy)	The conveyance of electricity through the high voltage backbone system.
Transnational crime	Offenses whose inception, perpetration, and/or direct or indirect effects involve more than one country. (UNODC)
Transnational higher education	All types and modes of higher education study programs, sets of courses of study, or educational services (including distance education and study abroad programs) which involve: education systems of a State different from the State where a transnational higher education provider operates; programs which may operate independently of any national education system; or programs where the learners are located in a country different from the one where the awarding institution is based. (RA 11448, 2019)
Treatment, storage, and disposal facilities	Facilities where hazardous wastes are stored, treated, recycled, reprocessed, or disposed of. (DENR AO 36, s. 2004)
Twenty foot equivalent unit	The unit of the capacity of a container ship, a container terminal, and the statistics of the container transit in a port.
Underemployment	This refers to the employed persons who express the desire to have additional hours of work in their present job or an additional job, or have a new job with longer working hours. (PSA)
Under-five mortality rate	The probability of dying between birth and age five, expressed as the number of deaths below age five per 1,000 live births during a given period.
Underpass	A road or pedestrian tunnel passing under a road or railway.
Undocumented overseas Filipinos	Filipinos abroad who do not possess or lack necessary documents required by the host country to make their stay legal or regular. For example, those who have expired visas, or those who have inappropriate visas (i.e., tourist visa possessors but are working abroad). Undocumented OFs include those who have regular status abroad but with no valid Philippine passport. (DFA, 2019)

Unemployed	This refers to persons in the labor force or economically active population (15 years old and above) who are unemployed or reporting without work (i.e., had no job or business during the basic survey reference period); and currently available for work (i.e., were available and willing to take up work in paid employment or self employment during the basic survey reference period, and/or would be available and willing to take up work in paid employment or self employment within two weeks after the interview date); and seeking work, (i.e., had taken specific steps to look for a job or establish a business during the basic survey reference period); or not seeking work due to the following reasons: tired/believe no work available (i.e., the discouraged workers who looked for work within the last six months prior to the interview date; awaiting results of previous job application; temporary illness/disability; (d) bad weather; and (e) waiting for rehire/job recall). (PSA Metadata, 2018)
Unemployment Rate	Proportion of unemployed persons to the total labor force. (PSA LFS Technical Notes)
Unemployment/unemployed	This consists of persons in the labor force who are reported as (1) without work; (2) currently available for work; and (3) seeking work, not seeking work because of the belief that no work is available, or awaiting results of previous job application or because of temporary illness or disability, bad weather or waiting for rehire or job recall. (PSA)
Universal accessibility	The quality of being accessible to the greatest extent possible by everyone, regardless of their age, ability, or status in life. (Center for Universal Design North Carolina State University, 2021)
Universal charge	A fixed amount approved by the ERC pursuant to Section 34 of RA 9136 imposed on all electricity end-users for the payment of in excess of the amount assumed by the national government and stranded contract costs of the NAPOCOR and environmental charge.
Unregulated fishing	Fishing activities conducted by: (a) vessels without nationality but operated by a Filipino and/or Filipino corporation; (b) Philippine flagged fishing vessels operating in areas or fish stocks where there are no applicable conservation and management measures; and (c) Philippine flagged fishing vessels operating in areas of fish stocks where there are no applicable conservation and management measures. (RA 10654, 2015)

Unreported fishing	Fishing activities which have not been reported, or have been misreported to the DA, in contravention of national laws and regulations of the Philippines, or undertaken in the area of competence of a relevant Regional Fisheries Management Organization which have not been reported or have been misreported, in contravention of the reporting procedures of that organization and further elaborated by regulations to be promulgated by the Department. (RA 10654, 2015).
Upper-middle-income country	Upper-middle-income economies are those in which 2019 GNI per capita was between USD4,046 and USD12,535. (WB)
Urban	This refers to a barangay that has a population size of 5,000 or more; at least one establishment with a minimum of 100 employees; has five or more establishments with a minimum of 10 employees and five or more facilities within the 2-km radius from the barangay hall. (PSA, 2003)
Urban development	The process of occupation and use of land or space for activities such as residential, industrial, commercial, and the like or their combinations, necessary to carry out the functions of urban living. It entails the building or rebuilding of more or less permanent structures over land that is often withdrawn or converted from its original use, resulting in the creation of a built environment. (RA 11201, 2019)
Urban renewal	Rehabilitation and development of blighted and slum areas as well as the resettlement of beneficiaries. (Section 26 of RA 7270, 1992)
US-China Trade War	Conflict between the US and China over the latter's "unfair trade practices" and intellectual property issues. Tensions started when then US President Trump imposed tariffs and non-tariff barriers against China in January, 2018. Despite ongoing negotiations, tariffs and non-tariff measures remain on both sides.
Usufruct	The right to enjoy the property of another, with the obligation of preserving its form and substance, unless the title containing it or the law provides otherwise. (Article 562 of the Civil Code of the Philippines)
	This refers to the right to enjoy the property of another with the obligation of preserving its form and substance. (RA 9904, 2009)
Utility model	A protection option which is designed to protect innovations that are not sufficiently inventive to meet the inventive threshold required for standard patents application. It may be any useful machine, implement, tools, product, composition, process, improvement, or part of the same.
Value chains	The full range of activities that are required to bring a product or service from conception, through the different phases of production (involving a combination of physical transformation and the input of various producer services), delivery to final consumers, and final disposal after use.

Values	The beliefs and priorities of cultures and societies and the shared principles and guidelines that frame the social order and institutional life. (OECD, 2020)
Venture financing	A funding process in which the venture funding companies manage the funds of the investors who want to invest in new businesses which have the potential for high growth in future. The venture capital funding firms provide the funds to start ups in exchange for the equity stake.
Victims Compensation Program	A program established under RA 7309, which grants compensation for victims of unjust imprisonment or detention and victims of violent crimes.
Violent extremism	Beliefs and actions of people who support or use violence to achieve ideological, religious, or political goals, including terrorism and other forms of politically-motivated violence. (UNESCO)
Voice and accountability	A sub-indicator of the WB's Worldwide Governance Indicators. This indicator reflects perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media. (Kaufmann, Kraay, and Mastruzzi, 2010)
Vulnerability	The characteristics and circumstances of a community, system, or asset that make it susceptible to the damaging effects of a hazard. Vulnerability may arise from various physical, social, economic, and environmental factors such as poor design and construction of buildings, inadequate protection of assets, lack of public information and awareness, limited official recognition of risks and preparedness measures, and disregard for wise environmental management. (RA 10121, 2010; UNISDR, 2007)
Wanted fertility rate/Wanted total fertility rate	The average number of children a woman would have by the end of her childbearing years if she bore children at the current age-specific fertility rates, excluding unwanted births. (PSA, NDHS)
Waste-to-energy	This refers to the process of converting wastes with various technologies, usually the conversion of non-recyclable waste materials into useable heat, electricity, or fuel through a variety of processes. (DENR DO 2019-21)
Wasting	Current or recent or active malnutrition characterized by very low weight-for-height as a result of deficits in both muscle tissue and fat mass.
Water district	This refers to government-owned and controlled corporations (GOCCs) created primarily to acquire, install, operate, maintain, and improve water supply and distribution systems for domestic, industrial, and municipal uses of residents and to provide, maintain and operate waste water collection, treatment and disposal facilities within the boundaries of the district.

Water Quality Management Areas	Designated areas with similar hydrological, hydrogeological, meteorological, or geographic conditions which affect the physicochemical, biological, and bacteriological reactions and diffusions of pollutants in the water bodies, or otherwise share common interest or face similar development programs, prospects, or problems. (RA 9275, 2004)
Water scarcity	Scarcity in availability due to physical shortage or scarcity in access due to the failure of institutions to ensure a regular supply or due to a lack of adequate infrastructure. (UN-Water)
Water security	The capacity of a population to safeguard sustainable access to adequate quantities of acceptable quality water for sustaining livelihoods, human well-being, and socioeconomic development for ensuring protection against water-borne pollution and water-related disasters and preserving ecosystems in a climate of peace and political stability. (UN-Water)
Water-energy-food nexus	The inextricable linkages between the three domains: water, energy, and food, which require a suitably integrated approach in ensuring water and food security, and sustainable agriculture and energy production worldwide. (UN-Water)
Watershed	A land area drained by a stream or fixed body of water and its tributaries having a common outlet for surface run-off. It is also known as basin or catchment areas. (PD 705 and PD 1559, 1975)
Weighbridges	This is used to weigh entire vehicles and their contents and are usually mounted permanently on a concrete foundation.
Wetlands	Areas of marsh, peatland, or water, whether natural or artificial, permanent or temporary, with water that is static, flowing, fresh, brackish, or salt, including area of marine water, the depth of which at low tide does not exceed six meters. (Ramsar Convention on Wetlands)
WHO Solidarity Clinical Trials	International randomized clinical trial program with the aim of obtaining an effective COVID-19 treatment. The program involves 12,000 patients and 500 hospital sites in over 30 countries. Evaluations cover treatment options and their impact on a COVID-19 patient's mortality, need for assisted ventilation, and duration of hospital stay.
WHO Solidarity Vaccine Trials	International randomized and controlled vaccine trial program with the goal of evaluating the risks and benefits of different COVID-19 vaccines. Over 287 candidate vaccines are currently involved at different stages of development. Participant sites are based on sufficient transmission rates.
Whole-of-Government approach	An approach where a government actively uses formal or informal networks across different agencies to coordinate the design and implementation of interventions in order to increase the effectiveness of those interventions in achieving the desired objectives. (OECD, 2006)

Wholesale electricity spot market	The market where competitive, efficient, transparent, and reliable market/trading of electricity will be made.
Wildlife	Wild forms and varieties of flora and fauna, in all developmental stages, including those which are in captivity or are being bred or propagated. (RA 9147, 2001)
Witness Protection Program	A program established under RA 6981, which seeks to encourage a person who has witnessed or has knowledge of the commission of a crime to testify before a court or quasi-judicial body, or before an investigating authority, by protecting him from reprisals and from economic dislocation.
World Justice Project Rule of Law Sub-indicator on Civil Justice	Measures whether civil justice systems are accessible and affordable, free of discrimination, corruption, and improper influence by public officials. It examines whether court proceedings are conducted without unreasonable delays, and if decisions are enforced effectively. It also measures the accessibility, impartiality, and effectiveness of alternative dispute resolution (ADR) mechanisms.
World Justice Project Rule of Law Sub-indicator on Criminal Justice	Measures whether the criminal investigation, adjudication, and correctional systems are effective, and whether the criminal justice system is impartial, free of corruption, free of improper influence, and protective of due process and the rights of the accused.
World Justice Project Rule of Law Sub-indicator on Fundamental Rights	Measures the protection of fundamental human rights, including effective enforcement of laws that ensure equal protection, the right to life and security of the person, due process of law and the rights of the accused, freedom of opinion and expression, freedom of belief and religion, the right to privacy, freedom of assembly and association, and fundamental labor rights, including the right to collective bargaining, the prohibition of forced and child labor, and the elimination of discrimination.
World Governance Indicator	A research dataset summarizing the views on the quality of governance provided by a large number of enterprise, citizen, and expert survey respondents in industrial and developing countries. These data are gathered from a number of survey institutes, think tanks, NGOs, international organizations, and private sector firms.
World Governance Indicator – Rule of Law	A sub-indicator of the World Governance Indicator (WGI) which entails perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence.

World Justice Project – Rule of Law Index	A quantitative assessment tool designed by the World Justice Project to offer a comprehensive picture of the extent to which countries adhere to the rule of law, not in theory, but in practice. It is derived from a set of principles that constitute a working definition of the rule of law.
Worldwide Governance Indicators	A research dataset developed by the WB reporting on aggregate and individual governance indicators for over 200 countries and territories over the period 1996-2018, for six dimensions of governance: voice and accountability; political stability and absence of violence; government effectiveness; regulatory quality; rule of law; and control of corruption. These aggregate indicators combine the views of a large number of enterprise, citizen, and expert survey respondents in industrial and developing countries. They are based on over 30 individual data sources produced by a variety of survey institutes, think tanks, NGOs, international organizations, and private sector firms. (WB)
Yield	An indicator of productivity for agricultural commodities derived by dividing total production by the area harvested. (PSA)
Youths-at-risk	This refers to the youth who are less likely to transition successfully to adulthood. In the context of the labor sector, these are the young people whose prospects of joining the labor force or finding employment are diminished by their various circumstances (e.g. lack of skills or education, economic recession).
Zoonotic disease	An infectious disease that has jumped from a non-human animal to humans. (WHO)

References

Chapter 2: Global and Regional Trends and Prospects

- World Health Organization (WHO) website. (Source: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>)
- The Economist. The covid-19 pandemic is worse than official figures show. September 26, 2020.
- WHO website. (Source: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/question-and-answers-hub/q-a-detail/coronavirus-disease-covid-19-serology>)
- WHO, COVID-19 Weekly Epidemiological Update, October 18, 2020.
- WHO. ACT-Accelerator Status Report & Plan, September 2020 – December 2021.
- WHO. Draft landscape of COVID-19 candidate vaccines, October 19 2020.
- WHO website. (Source: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/question-and-answers-hub/q-a-detail/coronavirus-disease-covid-19>)
- DOST Press Release, “DOST Prepares for WHO Solidarity Trials” October 9 2020 (Source: <https://www.dost.gov.ph/knowledge-resources/news/67-2020-news/2017-dost-prepares-for-who-solidarity-trials.html>)
- DOH Press Release, “DOST-led sub-TWG on vaccine dev’t gears up for vaccine trials in the Philippines”, October 10 2020 (Source: <https://doh.gov.ph/press-release/DOST-LED-SUB-TWG-ON-VACCINE-DEV%E2%80%99T-GEARS-UP-FOR-VACCINE-TRIALS-IN-THE-PHILIPPINES>)
- WB. East Asia and the Pacific Economic Update, October 2020.
- Center for Global Development, COVID-19 Vaccine Predictions: Using Mathematical Modelling and Expert Opinions to Estimate Timelines and Probabilities of Success of COVID-19 Vaccines, CGD Policy Paper 183, October 2020.
- Financial Times, Not enough Covid vaccine for all until 2024 says biggest producer, September 14, 2020.
- WHO. ACT-Accelerator Status Report & Plan, September 2020 – December 2021.
- Global Preparedness Monitoring Board. “A world at risk: annual report on global preparedness for health emergencies.” 2019.
- United Nations Intergovernmental Panel on Climate Change (UN-IPCC) Special Report: Global Warming of 1.5C.
- UN Climate Action Summit 2019.
- Climate Analytics, Country Profile: Philippines, “Decarbonising South and South East Asia”, May 2019.
- DOST-PAGASA, 2018.
- International Monetary Fund (IMF). World Economic Outlook. October 2020.
- IMF. World Economic Outlook database. October 2020.
- WTO. Trade Statistics and Outlook, “Trade set to plunge as COVID-19 pandemic upends global economy.” April 8, 2020.
- WTO. Report of the TPRB from the Director-General on Trade-Related Developments. July 10, 2020.
- IATA. “June data and revised air travel outlook.” July 28 2020; “Downgrade for global air travel outlook.” September 29, 2020.
- UNWTO. World Tourism Barometer. August/September 2020.

United Nations Conference on Trade and Development (UNCTAD). Global Foreign Direct Investment Slides for Third Consecutive Year, June 12, 2019. (Source: <https://unctad.org/news/global-foreign-direct-investment-slides-third-consecutive-year>)

UNCTAD. World Investment Report 2020.

The Economist. “The Eternal Zero.” October 8, 2020.

Capital Economics. “Global State of Play.” June 2020.

The Economist. “The coming surge in separatism.” in *The World in 2020*.

UN Department of Economic and Social Affairs. *World Population Prospects 2019: Highlights*, June 17, 2019.

United Nations Population Fund (UNFPA), *Impact of the COVID-19 Pandemic on Family Planning and Ending Gender-based Violence, Female Genital Mutilation and Child Marriage*, April 2020.

UNDESA, *World Population Prospects 2019*, custom data acquired via website.

WB. *Poverty and Shared Prosperity 2020*.

Organisation for Economic Co-operation and Development (OECD). *Science, Technology and Innovation Outlook 2018*.

The Economist. “Of anniversaries and climate change, 2019 in Review: Science and Technology,” (Source: <https://www.economist.com/science-and-technology/2019/12/29/2019-in-review-science-and-technology>)

“Three technological trends that will shape the decade.” *Financial Times*. (Source: <https://www.ft.com/content/a5e43158-3066-11ea-a329-0bcf87a328f2>)

Oswald, Ed. “Welcome to the 2020s. Here’s the tech that will shape the next decade.” *Digital Trends*. (Source: <https://www.digitaltrends.com/cool-tech/2020-tech-trends-for-the-decade/>)

New York Times. *NASA Launches Perseverance Rover, Capping Summer of Missions to Mars*. July 30, 2020.

Bloomberg. *Virgin Galactic Delays Key Flight*. August 4, 2020.

The Washington Post. *Jeff Bezos’s secretive space venture launches a rocket to the edge of space for the first time in months*. October 14, 2020.

McKinsey Global Institute. “How will automation affect jobs, skills, and wages?” March 23, 2018 Podcast transcript. <https://www.mckinsey.com/featured-insights/future-of-work/how-will-automation-affect-jobs-skills-and-wages> (accessed January 8, 2020).

Chapter 8: Expanding Economic Opportunities in Agriculture, Forestry, and Fisheries and Ensuring Food Security

Joint HLURB, DAR, DA, DILG Memorandum Circular, dated March 21, 1995, Prescribing the Guidelines to Implement MC 54 (The Authority of Cities and Municipalities to Reclassify Lands Within the Limits Prescribed by Section 20 of RA 7160 Otherwise Known as the Local Government Code of 1991).

Innovative Urban Tenure in the Philippines: Challenges, Approaches and Institutionalization. UN Human Settlements Programme, 2012.

Chapter 9A: Expanding Economic Opportunities in Industry

We Recover As One. (Source: <http://www.neda.gov.ph/we-recover-as-one/>)

Philippines Digital Economy Report: Leveraging the Digital Economy for A Better Normal.

Chapter 9B: Expanding Economic Opportunities in Services

Circular No. 1048, Series of 2019. “BSP Regulations on Financial Consumer Protection; Guidelines and Procedures Governing the Consumer Assistance and Management System of BSP-Supervised Financial Institutions; and Amendments to the Manual of Regulations for Banks and Non-Bank Financial Institutions.” Issued 6 September 2019.

Chapter 9C: Expanding Access to Economic Opportunities in I&S for Startups, MSMEs, and Cooperatives

Albert J.G. et al. Measuring and Examining Innovation in Philippine Business and Industry. September 2017. (Source: <https://pidswebs.pids.gov.ph/CDN/PUBLICATIONS/pidsdps1728.pdf>)

Chapter 10: Human Capital Development Towards Greater Agility

2017 National Demographic and Health Survey (NDHS).
Philippines: Tuberculosis country profile 2017. (Source: https://extranet.who.int/sree/Reports?op=Replet&name=/WHO_HQ_Reports/G2/PROD/EXT/TBCountryProfile&ISO2=PH&outtype=pdf)
National TB Prevalence Survey.
DOH. Malaria Control Program. (Source: <https://www.doh.gov.ph/malaria-control-program>)
TESDA. (2018). National Technical and Education Skills Development Plan 2018-2022: Vibrant Quality TVET.
National Economic and Development Authority (2018), Socioeconomic Report.
International Labour Organization (ILO). (2020). ILO monitor: COVID-19 and the world of work. Fourth edition. (Source: https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/documents/briefingnote/wcms_745963.pdf)

Chapter 11: Ensuring Food Resiliency and Reducing Vulnerabilities of Filipinos

DSWD. Pantawid Pamilyang Pilipino Program National Advisory Committee Resolution No. 43. Institutionalizing replacement policy allowing for continuous replacement of CCT households.
Acosta, P., Avalos, J., Zapanta, A. (2019). Pantawid Pamilya 2017 Assessment. World Bank Social Protection Policy Note.
Tabuga, A., Cabaero, C. (2019) Towards Inclusive Social Protection Program Coverage in the Philippines: Examining Gender Disparities.
Perez, N. D., and Pradesha, A.. (2019). Philippine Rice Trade Liberalization: Impacts on agriculture and the economy and alternative policy actions. NEDA-International Food Policy Research Institute Policy Studies.
Albert, JR, Abrigo, MR, Quimba, FM, Vizmanos, JF. Poverty, the Middle Class, and Income Distribution amid COVID-19. PIDS Discussion Series.
DSWD. (May 2020). DSWD SAP 1st Tranche Implementation Monitoring and Evaluation Report.

Chapter 13: Reaching for the Demographic Dividend Across All Regions

Abrigo, Michael R.M, et al. “Are We Missing Out on the Demographic Dividend? Trends and Prospects.” Philippine Institute for Development Studies Discussion Paper Series, no. 43, ser. 2018, Dec. 2018. (Source: www.pids.gov.ph/publications/6756)

National Strategy for Financial Inclusion

Population Action International. ”Integrated Population, Health and Environment (PHE) More than the Sum of its part. (Source: <https://pai.org/wp-content/uploads/2014/02/PHEintegration.pdf>)

Philippine Youth Development Plan 2017-2022.

Adolescents and Young People & Coronavirus Disease (COVID-19), Coronavirus Disease (COVID-19) Preparedness and Response UNFPA Interim Technical Brief, 2020.

Chapter 14: Vigorously Advancing Science, Technology, and Innovation

del Prado F. and Rosellon M. (2017). “Technology and Knowledge Transfers in Production Networks: Case Study on Philippine Food Manufacturing Firms”. Philippine Institute of Development Studies.

Chapter 15: Ensuring Sound Macroeconomic Policy

Bureau of the Treasury (2017). The Philippine Roadmap: Local Currency Debt Market Development. (Source: http://www.treasury.gov.ph/wp-content/uploads/2017/10/Local-Currency-Debt-Market-Development-Roadmap_ppt-1.pdf)

Memorandum No. M-2020-039 dated 4 May 2020. (Source: <http://www.bsp.gov.ph/downloads/regulations/attachments/2020/m039.pdf>)

Memorandum No. M-2020-008 dated 14 March 2020. (Source: <http://www.bsp.gov.ph/downloads/regulations/attachments/2020/m008.pdf>)

International Monetary Fund. (May 13, 2020). Banking Sector Regulatory and Supervisory Response to Deal with Coronavirus Impact (with Q and A). (Source: <https://www.imf.org/en/Publications/SPROLLS/covid19-special-notes#mfp>)

DOLE Labor Advisory 2020-17 issued 16 May 2020, “Guidelines on the Employment Preservation upon the Resumption of Business Operation”.

PEZA Memorandum Circular 2020-011 dated 5 March 2020, “PEZA Assistance to Ecozone I.T. Enterprises in Responding to COVID-19 (Coronavirus Disease).”

Chapter 21: Protecting the Rights, Promoting the Welfare, and Expanding Opportunities for Overseas Filipinos

World Bank. Migration and Remittances. (Source: <https://www.worldbank.org/en/topic/labormarkets/brief/migration-and-remittances>)

Updated PDP 2017-2022 Plan Steering Committee (PSC) Members

Chairperson

Karl Kendrick T. Chua
Socioeconomic Planning Secretary

Members

Karlo Alexei B. Nograles
Cabinet Secretary
Office of the President

William D. Dar
Secretary
Department of Agriculture

Wendel E. Avisado
Secretary
Department of Budget and Management

Roy A. Cimatu
Secretary
Department of Environment and Natural Resources

Carlos G. Dominguez III
Secretary
Department of Finance

Francisco T. Duque III
Secretary
Department of Health

Gregorio B. Honasan II
Secretary
Department of Information and Communications
Technology

Eduardo M. Año
Secretary
Department of the Interior and Local Government

Silvestre H. Belo III
Secretary
Department of Labor and Employment

Delfin N. Lorenzana
Secretary
Department of National Defense

Mark A. Villar
Secretary
Department of Public Works and Highways

Fortunato T. Dela Peña
Secretary
Department of Science and Technology

Rolando Joselito D. Bautista
Secretary
Department of Social Welfare and Development

Ramon M. Lopez
Secretary
Department of Trade and Industry

Arthur P. Tugade
Secretary
Department of Transportation

Ahod Ebrahim
Chief Minister
Bangsamoro Autonomous Region in Muslim
Mindanao

Hermogenes C. Esperon Jr.
Secretary
National Security Council

Diosdado M. Peralta
Chief Justice
Supreme Court

Updated PDP 2017-2022 Planning Committees

PLANNING COMMITTEE ON ECONOMIC DEVELOPMENT

Chair: Department of Trade and Industry (DTI)

Co-Chair: Department of Agriculture (DA)

Member Agencies:

Department of Science and Technology (DOST)
Department of Environment and Natural Resources (DENR)
Department of the Interior and Local Government (DILG)
Philippine Statistics Authority (PSA)
Philippine Institute for Development Studies (PIDS)
Land Bank of the Philippines (LANDBANK)
Department of Agrarian Reform (DAR)
Department of Foreign Affairs (DFA)
DA - Bureau of Fisheries and Aquatic Resources (DA-BFAR)
Department of Finance (DOF)
Department of Transportation (DOTr)
Department of Tourism (DOT)
Department of Energy (DOE)
Bangko Sentral ng Pilipinas (BSP)
Department of Information and Communications Technology (DICT)
Department of Labor and Employment (DOLE)
Philippine Commission on Women (PCW)
National Nutrition Council (NNC)
Office of the President - Office of the Cabinet Secretariat (OP-OCS)
Development Bank of the Philippines (DBP)
Senate Economic Planning Office (SEPO)
Congressional Policy and Budget Research Department (CPBRD)

Secretariat: National Economic and Development Authority - Agriculture, Natural Resources,
and Environment Staff (NEDA-ANRES)
NEDA - Trade, Services, and Industry Staff (NEDA-TSIS)

SUBCOMMITTEE ON AGRICULTURE, FORESTRY, AND FISHERIES (SC-AFF)

Chair: Department of Agriculture (DA)
Co-Chair: Department of Agrarian Reform (DAR)

Member Agencies:

DA - Agricultural Credit Policy Council (DA-ACPC)
DA - Agricultural Training Institute (DA-ATI)
DA - Bureau of Agricultural Research (DA-BAR)
DA - Bureau of Fisheries and Aquatic Resources (DA-BFAR)
DA - Bureau of Soils and Water Management (DA-BSWM)
Congressional Policy and Budget Research Department (CPBRD)
Cooperative Development Authority (CDA)
Department of Budget and Management (DBM)
Department of Environment and Natural Resources – Forest Management Bureau (DENR-FMB)
Department of Finance (DOF)
Department of Labor and Employment (DOLE)
Department of Trade and Industry (DTI)
Food and Drug Administration (FDA)
Land Bank of the Philippines (LANDBANK)
National Irrigation Administration (NIA)
National Nutrition Council (NNC)
Philippine Crop Insurance Corporation (PCIC)
Philippine Center for Postharvest Development and Mechanization (PHilMECH)
Philippine Coconut Authority (PCA)
Philippine Council for Agriculture, Aquatic, and Natural Resources Research and Development (PCAARRD)
Philippine Fiber Industry Development Authority (PHil FIDA)
Philippine Guarantee Corporation (PHILGUARANTEE)
Philippine Institute for Development Studies (PIDS)
Philippine Rice Research Institute (PhilRice)
Philippine Rubber Research Institute (PRRI)
Philippine Statistics Authority (PSA)
Senate Economic Planning Office (SEPO)
Sugar Regulatory Administration (SRA)
Technical Education and Skills Development Authority (TESDA)

SUBCOMMITTEE ON INDUSTRY

Chair: Department of Trade and Industry (DTI)
Co-Chair: DTI - Philippine Economic Zone Authority (DTI-PEZA)

Member Agencies:

Department of Trade and Industry (DTI)
DTI - Board of Investments (DTI-BOI)
DTI - Bureau of Trade and Industrial Policy Research (DTI-BTIPR)
DTI - Competitiveness Bureau (DTI-CB)
DTI - Philippine Accreditation Bureau (DTI-PAB)
DTI - Bureau of Philippine Standards (DTI-BPS)
DTI - Bureau of Small and Medium Enterprise Development (DTI-BSMED)
DTI - Planning and Management Service (DTI-PMS)
Cooperative Development Authority (CDA)
Technical Education and Skills Development Authority (TESDA)
DTI - Intellectual Property Office of the Philippines (DTI-IPOPHL)
DTI - Construction Industry Authority of the Philippines (DTI-CIAP)
DTI - Small Business Corporation (DTI-SBCorp)
Bangko Sentral ng Pilipinas (BSP)
Department of Energy (DOE)
Department of Environment and Natural Resources (DENR)
Department of Labor and Employment (DOLE)
Department of Science and Technology (DOST)
Philippine Council for Industry, Energy and Emerging Technology, Research and Development (PCIEERD)
Department of Agriculture (DA)
DA - Bureau of Fisheries and Aquatic Resources (DA-BFAR)
Department of the Interior and Local Government (DILG)
Philippine Institute for Development Studies (PIDS)
Philippine Statistics Authority (PSA)
Development Bank of the Philippines (DBP)
Senate Economic Planning Office (SEPO)
Congressional Policy and Budget Research Department (CPBRD)
Office of the President - Office of the Cabinet Secretariat (OP-OCS)

SUBCOMMITTEE ON SERVICES (SC-I&S)

Chair: Philippine Institute for Development Studies (PIDS)*
Co-Chair: Department of Information and Communications Technology (DICT)*

Member Agencies:

Department of Trade and Industry (DTI)
DTI - Board of Investments (DTI-BOI)
DTI - E-commerce Office (DTI-ECO)
DTI - Export Marketing Bureau (DTI-EMB)*
DTI - Bureau of Small and Medium Enterprise Development (DTI-BSMED)
Cooperative Development Authority (CDA)*
DTI - Intellectual Property Office of the Philippines (DTI-IPOPHL)*
DTI - Small Business Corporation (DTI-SBCorp)*
DTI - Philippine Economic Zone Authority (DTI-PEZA)
Technical Education and Skills Development Authority (TESDA)*
DTI - Design Center of the Philippines (DTI-DCP)
Department of Tourism (DOT)*
DOT - Tourism Infrastructure and Enterprise Zone Authority (DOT-TIEZA)
Department of Labor and Employment (DOLE)
Professional Regulation Commission (PRC)*
Philippine Overseas Employment Administration (POEA)*
Department of Finance (DOF)*
Insurance Commission (IC)*
National Telecommunications Commission (NTC)*
Department of the Interior and Local Government (DILG)
Philippine Postal Corporation (PHLPOST)
Department of Human Settlements and Urban Development (DHSUD)*
Department of Transportation (DOTr)*
Philippine Ports Authority (PPA)
Maritime Industry Authority (MARINA)
Civil Aeronautics Board (CAB)*
Civil Aviation Authority of the Philippines (CAAP)
Philippine Statistics Authority (PSA)*
Bangko Sentral ng Pilipinas (BSP)*
Senate Economic Planning Office (SEPO)*
House of Representatives (HOR) - Congressional Policy and Budget Research Department (CPBRD)
Commission on Higher Education (CHED)
Department of Health (DOH)
Film Development Council of the Philippines (FDCCP)

Note: Agencies with asterisk (*) have designated Official and Alternate Representatives.

PLANNING COMMITTEE ON HUMAN CAPITAL DEVELOPMENT

Chair: Department of Labor and Employment (DOLE)
Co-Chairs: Department of Education (DepEd)
Technical Education and Skills Development Authority (TESDA)
Commission on Higher Education (CHED)

Member Agencies:

Climate Change Commission (CCC)
Council for the Welfare of Children (CWC)
Department of Agriculture (DA)
Department of Agrarian Reform (DAR)
Department of Budget and Management (DBM)
Department of Human Settlements and Urban Development (DHSUD)
Department of Information and Communications Technology (DICT)
Department of the Interior and Local Government (DILG)
Department of Health (DOH)
Department of Labor and Employment (DOLE)
Department of Science and Technology (DOST)
Department of Social Welfare and Development (DSWD)
Early Childhood Care and Development (ECCD) Council
National Anti-Poverty Commission (NAPC)
National Council on Disability Affairs (NCDA)
National Commission on Indigenous Peoples (NCIP)
National Disaster Risk Reduction and Management Council (NDRRMC)
National Housing Authority (NHA)
National Nutrition Council (NNC)
National Youth Commission (NYC)
Office of the President - Office of the Cabinet Secretariat (OP-OCS)
OP - Office of the Executive Secretary (OP-OES)
Presidential Commission for the Urban Poor (PCUP)
Philippine Commission on Women (PCW)
Philippine Health Insurance Corporation (PhilHealth)
Philippine National Police (PNP)
Commission on Population and Development (POPCOM)
Philippine Statistics Authority (PSA)
Philippine Sports Commission (PSC)
Social Housing Finance Corporation (SHFC)
Social Security System (SSS)
National Economic and Development Authority (NEDA)

Secretariat: NEDA - Social Development Staff (NEDA-SDS)
NEDA - National Policy and Planning Staff (NEDA-NPPS)

SUBCOMMITTEE ON NUTRITION, HEALTH AND BASIC EDUCATION

Chair: Department of Education (DepEd)
Co-Chairs: Department of Health (DOH)
National Nutrition Council (NNC)

Member Agencies:

Commission on Population and Development (POPCOM)
Council for the Welfare of Children (CWC)
Early Childhood Care and Development (ECDD) Council
Department of Science and Technology - Food and Nutrition Research Institute (DOST-FNRI)
Philippine Health Insurance Corporation (PhilHealth)
Philippine Council for Health Research and Development (PCHRD)
National Youth Commission (NYC)
National Council on Disability Affairs (NCDA)
National Commission on Indigenous Peoples (NCIP)
Philippine Commission on Women (PCW)
Philippine Statistics Authority (PSA)
Philippine Sports Commission (PSC)
University of the Philippines - National Institutes of Health (UP-NIH)
House of Representatives - Committee on Health (HOR-CoH)
HOR - Committee on Basic Education and Culture (HOR-CBEC)
Senate Committee on Health and Demography (SCHD)
SC on Education, Arts, and Culture (SCEAC)
Technical Education and Skills Development Authority (TESDA)
Bangsamoro Autonomous Region in Muslim Mindanao (BARMM)
Task Force Bangon Marawi (TFBM)
National Economic and Development Authority (NEDA)

SUBCOMMITTEE ON SOCIAL PROTECTION

Chair: Department of Social Welfare and Development (DSWD)
Co-Chair: Department of Labor and Employment (DOLE)

Member Agencies:

Climate Change Commission (CCC)
Commission on Higher Education (CHED)
Council for the Welfare of Children (CWC)
Department of Agriculture (DA)
Department of Agrarian Reform (DAR)
Department of Budget and Management (DBM)
Department of Education (DepEd)
Department of Health (DOH)
Department of the Interior and Local Government (DILG)
Department of Science and Technology (DOST)
Department of Trade and Industry (DTI)
Employees' Compensation Commission (ECC)
Government Service Insurance System (GSIS)
League of Cities of the Philippines (LCP)
League of Municipalities of the Philippines (LMP)
League of Provinces of the Philippines (LPP)
National Anti-Poverty Commission (NAPC)
National Council on Disability Affairs (NCDA)
National Commission on Indigenous Peoples (NCIP)
National Economic and Development Authority (NEDA)
National Nutrition Council (NNC)
National Youth Commission (NYC)
Office of Civil Defense (OCD)
Philippine Commission on Women (PCW)
Philippine Health Insurance Corporation (PhilHealth)
Philippine Statistics Authority (PSA)
Social Security System (SSS)
Technical Education and Skills Development Authority (TESDA)

SUBCOMMITTEE ON SHELTER SECURITY

Chair: Department of Human Settlements and Urban Development (DHSUD)

Member Agencies:

National Housing Authority (NHA)
Home Development Mutual Fund (Pag-IBIG)
National Home Mortgage Finance Corporation (NHMFC)
Social Housing Finance Corporation (SHFC)
Philippine Guarantee Corporation (PHILGUARANTEE)
National Economic and Development Authority (NEDA)

SUBCOMMITTEE ON DEMOGRAPHIC DIVIDEND

Chair: Commission on Population and Development (POPCOM)

Member Agencies:

Department of Labor and Employment (DOLE)
Department of Social Welfare and Development (DSWD)
Department of Public Works and Highways (DPWH)
Department of Trade and Industry (DTI)
Department of Agrarian Reform (DAR)
Department of Agriculture (DA)
Department of Budget and Management (DBM)
Department of Human Settlements and Urban Development (DHSUD)
Department of the Interior and Local Government (DILG)
Department of Education (DepEd)
Department of Health (DOH)
Commission on Higher Education (CHED)
Philippine Commission on Women (PCW)
National Youth Commission (NYC)
Philippine Statistics Authority (PSA)
Technical Education and Skills Development Authority (TESDA)
University of the Philippines - Population Institute (UPPI)
Bangsamoro Autonomous Region in Muslim Mindanao (BARMM)
National Economic and Development Authority (NEDA)

SUBCOMMITTEE ON HIGHER EDUCATION, TRAINING, AND LABOR MARKET POLICIES

Chair: Department of Labor and Employment – Bureau of Local Employment (DOLE-BLE)

Co-Chairs: Commission on Higher Education (CHED)
Technical Education and Skills Development Authority (TESDA)

Member Agencies:

Department of Trade and Industry – Bureau of Small and Medium Enterprise Development (DTI-BSMED)

DTI- Export Development Council (DTI-EDC)

Department of Science and Technology – Science Education Institute (DOST-SEI)

DOLE - Bureau of Labor Relations (DOLE-BLR)

DOLE - Bureau of Working Conditions (DOLE-BWC)

DOLE - Institute for Labor Studies (DOLE-ILS)

DOLE - National Wages and Productivity Commission (DOLE-NWPC)

DOLE - Occupational Safety and Health Center (DOLE-OSHC)

DOLE - Employees' Compensation Commission (DOLE-ECC)

Professional Regulation Commission (PRC)

Commission on Filipinos Overseas (CFO)

Department of Education (DepEd)

Department of Agriculture (DA)

Department of Environment and Natural Resources (DENR)

Department of Information and Communications Technology (DICT)

National Anti-Poverty Commission (NAPC)

National Youth Commission (NYC)

Philippine Commission on Women (PCW)

Philippine Statistics Authority (PSA)

House of Representatives - Committee on Higher and Technical Education (HOR-CHTE)

HOR - Committee on Labor and Employment (HOR-CLE)

Department of Social Welfare and Development - Sustainable Livelihood Program (DSWD-SLP)

Social Security System (SSS)

National Economic and Development Authority (NEDA)

PLANNING COMMITTEE ON INTERNATIONAL MIGRATION AND DEVELOPMENT

Chair: Department of Labor and Employment (DOLE)
Co-Chair: Department of Foreign Affairs - Office on the Undersecretary for Migrant
Workers Affairs (DFA-OUMWA)

Member Agencies:

Bangko Sentral ng Pilipinas (BSP)
Commission on Filipinos Overseas (CFO)
Commission on Higher Education (CHED)
Department of Interior and Local Government (DILG)
Department of Health (DOH)
Department of Justice – Inter-Agency Council Against Trafficking (DOJ-IACAT)
DOLE - Institute for Labor Studies (DOLE-ILS)
DOLE - International Labor Affairs Bureau (DOLE- ILAB)
DOLE - National Reintegration Center for OFWs (DOLE-NRCO)
Department of Science and Technology (DOST)
Department of Social Welfare and Development (DSWD)
Department of Trade and Industry (DTI)
Home Development Mutual Fund (Pag-IBIG)
Office of the Presidential Adviser on Overseas Filipino Workers
Overseas Filipino Bank (OFBank)
Overseas Workers Welfare Administration (OWWA)
Philippine Health Insurance Corporation (PhilHealth)
Philippine Overseas Employment Administration (POEA)
Philippine Retirement Authority (PRA)
Philippine Statistics Authority (PSA)
Professional Regulation Commission (PRC)
Social Security System (SSS)
Technical Education and Skills Development Authority (TESDA)
Union of Local Authorities of the Philippines (ULAP)

Secretariat: National Economic and Development Authority - National Policy and Planning
Staff (NEDA-NPPS)

PLANNING COMMITTEE ON INFRASTRUCTURE DEVELOPMENT

Chair: Department of Public Works and Highways (DPWH)

Member Agencies:

National Economic and Development Authority (NEDA)
Office of the President - Office of the Executive Secretary (OP-OES)
OP - Office of the Cabinet Secretary (OP-OCS)
Department of Transportation (DOTr)
Department of Budget and Management (DBM)
Department of Finance (DOF)
Department of Trade and Industry (DTI)
Department of Energy (DOE)
Department of Agriculture (DA)
Department of Tourism (DOT)
Department of Information and Communications Technology (DICT)

Secretariat: NEDA - Infrastructure Staff (NEDA-IS)

SUBCOMMITTEE ON TRANSPORTATION

Chair: Department of Transportation (DOTr)
Co-Chair: Department of Public Works and Highways (DPWH)

Member Agencies:

Bases Conversion and Development Authority (BCDA)
DOTr - Civil Aviation Authority of the Philippines (DOTr-CAAP)
DOTr - Civil Aeronautics Board (DOTr-CAB)
Clark Development Corporation (CDC)
Cagayan Economic Zone Authority (CEZA)
Clark International Airport Corporation (CIAC)
DOTr - Cebu Ports Authority (DOTr-CPA)
DOTr - Davao International Airport Authority (DIAA)
Department of the Interior and Local Government (DILG)
Department of Human Settlements and Urban Development (DHSUD)
DOTr - Light Rail Transit Authority (DOTr-LRTA)
DOTr - Land Transportation Franchising and Regulatory Board (DOTr-LTFRB)
DOTr - Land Transportation Office (DOTr-LTO)
DOTr - Maritime Industry Authority (DOTr-MARINA)
DOTr - Mactan-Cebu International Airport Authority (DOTr-MCIAA)
DOTr - Manila International Airport Authority (DOTr-MIAA)
Metropolitan Manila Development Authority (MMDA)
DOTr - Office of Transportation Security (DOTr-OTS)
Philippine Coast Guard (PCG)
Department of Trade and Industry - Philippine Economic Zone Authority (DTI-PEZA)
DOTr - Philippine National Railways (DOTr-PNR)
Philippine Ports Authority (PPA)
Poro Point Management Corporation (PPMC)
Subic Bay Metropolitan Authority (SBMA)
DOTr - Toll Regulatory Board (DOTr-TRB)
University of the Philippines – National Center for Transportation Studies (UP-NCTS)
UP – School of Urban and Regional Planning (UP-SURP)

SUBCOMMITTEE ON WATER RESOURCES

Chair: National Economic and Development Authority (NEDA)

Co-Chair: National Water Resources Board (NWRB)

Member Agencies:

Core

Department of Finance (DOF)

Department of Budget and Management (DBM)

Department of Environment and Natural Resources (DENR)

Department of Health (DOH)

Department of Agriculture (DA)

Department of Energy (DOE)

Department of Public Works and Highways (DPWH)

Department of the Interior and Local Government (DILG)

Philippine Water Partnership (PWP)

University of the Philippines - National Hydraulic Research Center (UP-NHRC)

Department of Transportation (DOTr)

Department of Trade and Industry (DTI)

Department of Justice (DOJ)

Department of Tourism (DOT)

Office of the President - Office of the Executive Secretary (OP-OES)

Water Supply and Sanitation

Metropolitan Waterworks and Sewerage System (MWSS)

Local Water Utilities Administration (LWUS)

National Anti-Poverty Commission (NAPC)

Philippine Association of Water Districts (PAWD)

Department of Social Welfare and Development (DSWD)

Cooperative Development Authority (CDA)

Department of Agrarian Reform (DAR)

League of Provinces of the Philippines (LPP)

League of Cities of the Philippines (LCP)

League of Municipalities of the Philippines (LMP)

Irrigation

Department of Agrarian Reform (DAR)

National Irrigation Administration (NIA)

DA - Bureau of Soils and Water Management (DA-BSWM)

League of Provinces of the Philippines (LPP)

League of Cities of the Philippines (LCP)

League of Municipalities of the Philippines (LMP)

Flood Control and Management

Metropolitan Manila Development Authority (MMDA)

National Housing Authority (NHA)
Department of Human Settlements and Urban Development (DHSUD)
League of Provinces of the Philippines (LPP)
League of Cities of the Philippines (LCP)
League of Municipalities of the Philippines (LMP)

SUBCOMMITTEE ON INFORMATION AND COMMUNICATIONS TECHNOLOGY

Chair: Department of Information and Communications Technology (DICT)

Member Agencies:

Department of Public Works and Highways (DPWH)
Department of Transportation (DOTr)
Department of the Interior and Local Government (DILG)
Department of Health (DOH)
Department of Education (DepEd)
National Telecommunications Commission (NTC)
People's Television Network Inc. (PTNI)
National Grid Corporation of the Philippines (NGCP)
Light Rail Transit Authority (LRTA)

SUBCOMMITTEE ON POWER AND ENERGY

Chair: Department of Energy (DOE)

Member Agencies:

National Electrification Administration (NEA)
Energy Regulatory Commission (ERC)
Philippine National Oil Company (PNOC)
Power Sector Assets and Liabilities Management Corporation (PSALM)
National Power Corporation (NAPOCOR)
National Transmission Corporation (TransCo)
National Grid Corporation of the Philippines (NGCP)

PLANNING COMMITTEE ON MACROECONOMIC POLICY

Chair: Department of Budget and Management (DBM)

Member Agencies:

Department of Finance (DOF)
Bangko Sentral ng Pilipinas (BSP)
Department of Trade and Industry (DTI)
DOF - Bureau of the Treasury (DOF-BTr)
DOF - Bureau of Internal Revenue (DOF-BIR)
DOF - Bureau of Customs (DOF-BOC)
DOF - Bureau of Local Government Finance (DOF-BLGF)
Securities and Exchange Commission (SEC)
Government Service Insurance System (GSIS)
Social Security System (SSS)
Insurance Commission (IC)
Department of Foreign Affairs (DFA)
Department of Tourism (DOT)
Department of Agriculture (DA)
Office of the President (OP)
Philippine Statistics Authority (PSA)
Department of Labor and Employment (DOLE)
Department of Science and Technology (DOST)
DTI - Board of Investments (DTI-BOI)
Senate Economic Planning Office (SEPO)
Congressional Policy and Budget Research Department (CPBRD)

Secretariat: National Economic and Development Authority - National Policy and Planning Staff (NEDA-NPPS)

SUBCOMMITTEE ON FISCAL POLICY

Chair: Department of Finance (DOF)

Member Agencies:

Department of Budget and Management (DBM)
DOF - Bureau of the Treasury (DOF-BTr)
DOF - Bureau of Internal Revenue (DOF-BIR)
DOF - Bureau of Customs (DOF-BOC)
DOF - Bureau of Local Government Finance (DOF-BLGF)
Philippine Statistics Authority (PSA)

Secretariat: National Economic and Development Authority - National Policy and Planning Staff (NEDA-NPPS)

SUBCOMMITTEE ON MONETARY AND FINANCIAL SECTORS

Chair: Bangko Sentral ng Pilipinas (BSP)

Member Agencies:

Department of Finance (DOF)
DOF - Bureau of the Treasury (DOF-BTr)
Cooperative Development Authority (CDA)
Development Bank of the Philippines (DBP)
Department of Trade and Industry (DTI)
DTI- Export Development Council (DTI-EDC)
Government Service Insurance System (GSIS)
Insurance Commission (IC)
Land Bank of the Philippines (LANDBANK)
Philippine Deposit Insurance Corporation (PDIC)
Philippine Statistics Authority (PSA)
Securities and Exchange Commission (SEC)
Social Security System (SSS)

Secretariat: National Economic and Development Authority - National Policy and Planning Staff (NEDA-NPPS)

SUBCOMMITTEE ON EXTERNAL SECTORS

Chair: Department of Trade and Industry (DTI)

Co-Chair: Bangko Sentral ng Pilipinas (BSP)

Member Agencies:

DTI - Export Marketing Bureau (DTI-EMB)

DTI - Regional Operations Group (DTI-ROG)

DTI - Bureau of International Trade Relations (DTI-BITR)

DTI - Bureau of Import Services (DTI-BIS)

DTI - Bureau of Philippine Standards (DTI-BPS)

DTI - Planning and Management Service (DTI-PMS)

DTI - Bureau of Trade and Industrial Policy Research (DTI-BTIPR)

DTI - Foreign Trade Services Corps (DTI-FTSC)

DTI - Board of Investments (BOI) - Industry Development Services

DTI - BOI - International Marketing Department

BSP - Department of Economic Research

Department of Foreign Affairs (DFA) - Multilateral Affairs and International Economic Relations

DFA - United Nations and Other International Organizations

Department of Finance (DOF) - Fiscal Policy and Planning Office

DOF - Bureau of Customs (DOF-BOC)

Department of Science and Technology (DOST)

DOST - Planning and Evaluation Service

Department of Agriculture (DA) - Policy Research Service

DA - Planning and Monitoring Service

Department of Labor and Employment - International Labor Affairs Bureau (DOLE-ILAB)

Philippine Statistics Authority (PSA) - Sectoral Statistics Office - Economics Sector Statistics Service

Department of Tourism (DOT) - Tourism Development, Planning, Research and Information Management

Food and Drugs Administration (FDA)

Export Development Council (EDC) Secretariat

National Economic and Development Authority - Trade, Services, and Industry Staff (NEDA-TSIS)

NEDA - National Policy and Planning Staff (NEDA-NPPS)

Secretariat: NEDA-TSIS

PLANNING COMMITTEE ON COMPETITION

Chair: Philippine Competition Commission (PCC)

Member Agencies:

Anti-Red Tape Authority (ARTA)

Department of Finance – Office of the Chief Economist (DOF-OCE)

Department of Justice – Office for Competition (DOJ-OFC)

Department of Trade and Industry – Consumer Protection Group (DTI-CPG)

Governance Commission on Government-Owned and Controlled Corporations (GCG)

Government Procurement Policy Board (GPPB)

National Economic and Development Authority (NEDA)

Philippine Competition Commission (PCC)

Secretariat: NEDA - Governance Staff (NEDA-GovS)

PLANNING COMMITTEE ON RESPONSIVE, PEOPLE-CENTERED, TECHNOLOGY-ENABLED, AND CLEAN GOVERNANCE

Chair: National Economic and Development Authority (NEDA)

Co-Chair: Department of the Interior and Local Government (DILG)

Member Agencies:

Commission on Audit (COA)

Civil Service Commission (CSC)

Department of Budget and Management (DBM)

Department of Information and Communications Technology (DICT)

Department of Justice (DOJ)

Development Academy of the Philippines (DAP)

Governance Commission for Government-Owned or Controlled Corporations (GCG)

Office of the President - Office of the Cabinet Secretariat (OP-OCS)

Office of the Ombudsman (OMB)

Anti-Red Tape Authority (ARTA)

Commission on Elections (COMELEC)

Philippine Statistics Authority (PSA)

Secretariat: NEDA - Governance Staff (NEDA-GovS)

PLANNING COMMITTEE ON JUSTICE

Chair: Department of Justice (DOJ)

Member Agencies:

Supreme Court of the Philippines (SCP)
Commission on Human Rights (CHR)
Department of the Interior and Local Government (DILG)
DOJ - Bureau of Corrections (DOJ-BuCor)
DOJ - National Prosecution Service (DOJ-NPS)
DOJ - Office for Alternative Dispute Resolution (DOJ-OADR)
DOJ - Public Attorney's Office (DOJ-PAO)
DOJ - Parole and Probation Administration (DOJ-PPA)
DILG - Bureau of Jail Management and Penology (DILG-BJMP)
DILG - Bureau of Local Governance Supervision (DILG-BLGS)
DILG - Philippine National Police (DILG-PNP)

Secretariat: National Economic and Development Authority - Governance Staff
(NEDA-GovS)

PLANNING COMMITTEE ON PEACE, SECURITY, AND PUBLIC ORDER

Chair: Department of National Defense (DND)

Member Agencies:

Office of the Presidential Adviser on the Peace Process (OPAPP)
Department of the Interior and Local Government (DILG)
Department of Foreign Affairs (DFA)
Commission on Human Rights (CHR)
Bangsamoro Autonomous Region in Muslim Mindanao (BARMM)
National Security Council (NSC)
National Task Force to End Local Communist Armed Conflict (NTF-ELCAC)
DILG - Philippine National Police (PNP)
DILG - Bureau of Fire Protection (BFP)
Philippine Drug Enforcement Agency (PDEA)
Dangerous Drugs Board (DDB)
National Coast Watch Council

Secretariat: National Economic and Development Authority - Regional Development Staff
(NEDA-RDS)

SUBCOMMITTEE ON PEACE AND DEVELOPMENT

Chair: Office of the Presidential Adviser on the Peace Process (OPAPP)

Member Agencies:

Department of National Defense (DND)
Bangsamoro Autonomous Region in Muslim Mindanao (BARMM)
National Task Force to End Local Communist Armed Conflict (NTF-ELCAC)
National Security Council (NSC)
Philippine Commission on Women (PCW)
Philippine Statistics Authority (PSA)
Mindanao Development Authority (MinDA)
Anti-Terrorism Council (ATC)

SUBCOMMITTEE ON SECURITY, PUBLIC ORDER, AND SAFETY

Chair: Department of the Interior and Local Government (DILG)

Member Agencies:

Anti-Terrorism Council (ATC)
Bangsamoro Autonomous Region in Muslim Mindanao (BARMM)
DILG - Bureau of Fire Protection (DILG-BFP)
Department of Agriculture - Bureau of Fisheries and Aquatic Resources (DA-BFAR)
Commission on Human Rights (CHR)
Dangerous Drugs Board (DDB)
Department of Foreign Affairs (DFA)
Department of Justice (DOJ)
Department of National Defense (DND)
Mindanao Development Authority (MinDA)
National Coast Watch Council
DILG - National Police Commission (DILG-NAPOLCOM)
National Security Council (NSC)
Office of Civil Defense (OCD)
Philippine Center on Transnational Crime (PCTC)
Philippine Coast Guard (PCG)
Philippine Commission on Women (PCW)
Philippine Drug Enforcement Agency (PDEA)
DILG - Philippine National Police (DILG-PNP)
Philippine Statistics Authority (PSA)

PLANNING COMMITTEE ON CULTURE

Chair: National Commission for Culture and the Arts (NCCA)

Co-Chair: Department of Labor and Employment (DOLE)

Member Agencies:

Commission on Higher Education (CHED)

Department of Education (DepEd)

Department of Tourism (DOT)

Department of Trade and Industry - Design Center of the Philippines (DTI-DCP)

Film Development Council of the Philippines (FDCP)

Movie and Television Review and Classification Board (MTRCB)

National Commission on Indigenous Peoples (NCIP)

National Commission on Muslim Filipinos (NCMF)

National Economic and Development Authority (NEDA)

Philippine Sports Commission (PSC)

Office of the President - Presidential Communications Operations Office (OP-PCOO)

Technical Education and Skills Development Authority (TESDA)

Resource Persons:

Civil Service Commission - Civil Service Institute (CSC-CSI)

Cultural Center of the Philippines (CCP)

Department of Foreign Affairs (DFA)

Department of the Interior and Local Government (DILG)

Komisyon sa Wikang Filipino (KWF)

National Archives of the Philippines (NAP)

National Council on Disability Affairs (NCDA)

National Historical Commission of the Philippines (NHCP)

National Library of the Philippines (NLP)

National Museum of the Philippines (NMP)

National Youth Commission (NYC)

Philippine Commission on Women (PCW)

Philippine Information Agency (PIA)

Secretariat: NEDA - Governance Staff (NEDA-GovS)

PLANNING COMMITTEE ON ECOLOGICAL INTERGRITY

Chair: Department of Environment and Natural Resources (DENR)

Member Agencies:

Climate Change Commission (CCC)
Commission on Population and Development (POPCOM)
Department of Agriculture - Bureau of Fisheries and Aquatic Resources (DA-BFAR)
DA - Bureau of Soils and Water Management (DA-BSWM)
Department of Budget and Management (DBM)
Department of Education (DepEd)
Department of Energy (DOE)
DENR - Policy and Planning Service (DENR-PPS)
DENR - Biodiversity Management Bureau (DENR-BMB)
DENR - Ecosystems Research and Development Bureau (DENR-ERDB)
DENR - Environmental Management Bureau (DENR-EMB)
DENR - Forest Management Bureau (DENR-FMB)
DENR - Land Management Bureau (DENR-LMB)
DENR - Mines and Geosciences Bureau (DENR-MGB)
DENR - River Basin Control Office (DENR-RBCO)
Department of Finance (DOF)
Department of Health (DOH)
Department of Human Settlements and Urban Development (DHSUD)
Department of Public Works and Highways (DPWH)
Department of Science and Technology - Philippine Atmospheric, Geophysical and Astronomical Services Administration (DOST- PAGASA)
DOST - Philippine Council for Agriculture, Aquatic, and Natural Resources Research and Development (DOST-PCAARRD)
DOST - Philippine Institute of Volcanology and Seismology (DOST-PHIVOLCS)
Department of the Interior and Local Government (DILG)
Department of Tourism (DOT)
Department of Trade and Industry (DTI)
Department of Transportation-Land Transportation Franchising and Regulatory Board (DOTr-LTFRB)
House of Representatives - Committee on Ecology (HOR-Comm. on Ecology)
HOR - Committee on Natural Resources (HOR-Comm. on NatRes)
HOR - Congressional Policy and Budget Research Department (HOR-CPBRD)
HOR - Committee on Climate Change (HOR-Comm. on CC)
Metropolitan Manila Development Authority (MMDA)
National Coast Watch Council
National Commission on Indigenous Peoples (NCIP)
DENR - National Mapping and Resource Information Authority (DENR-NAMRIA)
National Solid Waste Management Commission (NSWMC)

National Water Resources Board (NWRB)
Office of Civil Defense - National Disaster Risk Reduction and Management Council (OCD-NDRRMC)
Philippine Center for Environmental Protection and Sustainable Development Inc. (PCEPSDI)
Philippine Institute for Development Studies (PIDS)
Philippine Reclamation Authority (PRA)
Philippine Statistics Authority (PSA)
Senate Committee on Environment, Natural Resources, and Climate Change (Senate-Comm. on ENR and CC)
Senate Economic Planning Office (SEPO)

Secretariat: National Economic and Development Authority - Agriculture, Natural Resources, and Environment Staff (NEDA-ANRES)

SUBCOMMITTEE ON BIODIVERSITY

Chair: Department of Environment and Natural Resources- Policy and Planning Service
(DENR-PPS)

Member Agencies:

Commission on Higher Education (CHED)
Commission on Population and Development (POPCOM)
Department of Agriculture - Bureau of Fisheries and Aquatic Resources (DA-BFAR)
DA - Bureau of Soils and Water Management (DA-BSWM)
Department of Budget and Management (DBM)
Department of Education (DepEd)
DENR - Biodiversity Management Bureau (DENR-BMB)
DENR - Ecosystems Research and Development Bureau (DENR-ERDB)
DENR - Environmental Management Bureau (DENR-EMB)
DENR - Forest Management Bureau (DENR-FMB)
DENR - Land Management Bureau (DENR-LMB)
DENR - Mines and Geosciences Bureau (DENR-MGB)
DENR - River Basin Control Office (DENR-RBCO)
Department of Human Settlements and Urban Development (DHSUD)
Department of the Interior and Local Government - Bureau of Local Government Supervision (DILG-BLGS)
Department of Science and Technology - Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development (DOST-PCAARRD)
DOST - Planning and Evaluation Service (DOST-PES)
Department of Tourism (DOT)
Department of Trade and Industry - Board of Investments (DTI-BOI)
House of Representatives - Committee on Natural Resources (HOR-Comm. on NatRes)
HOR - Congressional Policy and Budget Research Department (HOR-CPBRD)
National Commission on Indigenous Peoples (NCIP)
National Economic and Development Authority - Monitoring and Evaluation Staff (NEDA-MES)
National Fisheries Research and Development Institute (NFRDI)
DENR - National Mapping and Resource Information Authority (DENR-NAMRIA)
National Water Resources Board (NWRB)
Philippine Reclamation Authority (PRA)
Philippine Statistics Authority (PSA)
Senate Committee on Environment and Natural Resources, and Climate Change (Senate-Comm. on ENR and CC)
Senate Economic Planning Office (SEPO)

SUBCOMMITTEE ON ENVIRONMENTAL QUALITY

Chair: Department of Environment and Natural Resources - Environmental Management Bureau (DENR-EMB)

Member Agencies:

Department of Agriculture - Bureau of Fisheries and Aquatic Resources (DA-BFAR)
DA - Bureau of Soils and Water Management (DA-BSWM)
Department of Budget and Management (DBM)
Department of Energy - Renewable Energy Management Bureau (DOE-REMB)
DENR - Mines and Geosciences Bureau (DENR-MGB)
Department of Health- Office for Policy and Health Systems (DOH-OPHS)
Department of Public Works and Highways - Planning Service (DPWH-Planning Service)
Department of Science and Technology - Philippine Council of Industry, Energy, and Emerging Technology Research and Development (DOST-PCIEERD)
Department of the Interior and Local Government (DILG)
DILG - Bureau of Local Government Supervision (DILG-BLGS)
Department of Tourism- Office of Tourism Development Planning, Research, and Information Management (DOT-OTDPRIM)
Department of Trade and Industry- Bureau of Philippine Standards (DTI-BPS)
Department of Transportation (DOTr)
DOTr - Land Transportation Franchising and Regulatory Board (DOTr-LTFRB)
DOTr - Land Transportation Office (DOTr-LTO)
DENR - Policy and Planning Service (DENR-PPS)
House of Representatives - Congressional Policy and Budget Research Department (HOR-CPBRD)
HOR - Committee on Ecology (HOR-Comm. on Ecology)
Laguna Lake Development Authority (LLDA)
Local Water Utilities Administration (LWUA)
Metropolitan Manila Development Authority (MMDA)
Metropolitan Waterworks and Sewage System (MWSS)
National Economic and Development Authority - Monitoring and Evaluation Staff (NEDA-MES)
DENR - National Mapping and Resource Information Authority (DENR-NAMRIA)
National Solid Waste Management Commission (NSWMC)
Philippine Statistics Authority (PSA)
Senate Economic Planning Office (SEPO)

SUBCOMMITTEE ON ECOSYSTEM RESILIENCY

Chair: Climate Change Commission - Climate Change Office (CCC-CCO)

Member Agencies:

Agricultural Credit Policy Council - Policy, Planning, Program Development and Advocacy Staff (ACPC-PPPDAS)
Commission on Higher Education - Office of Planning, Research, and Knowledge Management (CHED-OPRKM)
Department of Agriculture - Systems-Wide Climate Change Office (DA-SWCCO)
Department of Budget and Management (DBM)
Department of Education - Disaster Risk Reduction and Management Service (DepEd-DRRMS)
DepEd - Planning Service (DepEd-PS)
Department of Energy - Renewable Energy Management Bureau (DOE-REMB)
Department of Environment and Natural Resources - Ecosystems Research and Development Bureau (DENR-ERDB)
DENR - Mines and Geosciences Bureau (DENR-MGB)
DENR - Policy and Planning Service (DENR-PPS)
DENR - Climate Change Service (DENR-CCS)
Department of Finance - International Finance Group (DOF-IFG)
Department of Health - Health Facilities and Services Regulatory Bureau (DOH-HFSRB)
Department of Human Settlements and Urban Development (DHSUD)
Department of the Interior and Local Government (DILG)
DILG - Local Government Academy (DILG-LGA)
Department of Public Works and Highways - Bureau of Construction (DPWH-BOC)
Department of Science and Technology - Philippine Institute of Volcanology and Seismology (DOST-PHIVOLCS)
Department of Tourism - Office of Tourism Development Planning, Research and Information Management (DOT-OTDPRIM)
Department of Trade and Industry - Bureau of Small and Medium Enterprise Development (DTI-BSMED)
Government Service Insurance System - Insurance Group (GSIS-IG)
House of Representatives - Committee on Climate Change (HOR-Comm. on CC)
HOR - Committee on Ecology (HOR-Comm. on Ecology)
National Economic and Development Authority - Monitoring and Evaluation Staff (NEDA-MES)
NEDA - Regional Development Staff (NEDA-RDS)
DENR - National Mapping and Resource Information Authority (DENR-NAMRIA)
Office of Civil Defense - National Disaster Risk Reduction and Management Council (OCD-NDRRMC)
Philippine Crop Insurance Corporation - Planning and Management Information Office (PCIC-PMO)
Philippine Institute for Development Studies (PIDS)
Philippine Statistics Authority (PSA)
Senate Committee on Environment, Natural Resources and Climate Change (Senate-Comm. on ENR and CC)
Senate Economic Planning Office (SEPO)
Technical Education and Skills Development Authority - Planning Office (TESDA - Planning)

PLANNING COMMITTEE ON TECHNOLOGY AND INNOVATION

Chair: Department of Science and Technology (DOST)
Co-Chairs: Intellectual Property Office of the Philippines (IPOP HL)
Commission on Higher Education (CHED)

Member Agencies:

Department of Agriculture (DA)
Department of National Defense (DND)
Department of Health (DOH)
Department of Labor and Employment (DOLE)
Department of Trade and Industry (DTI)
Department of Science and Technology - National Academy of Science and Technology (DOST-NAST)
Department of Information and Communications Technology (DICT)
Philippine Institute for Development Studies (PIDS)
Department of Energy (DOE)
Philippine Statistics Authority (PSA)
Department of Public Works and Highways (DPWH)
Department of Budget and Management (DBM)
Department of Transportation (DOTr)
Department of Foreign Affairs (DFA)
Department of Environment and Natural Resources (DENR)
Department of Education (DepEd)
Department of the Interior and Local Government (DILG)

Secretariat: National Economic and Development Authority - Trade, Services, and Industry Staff (NEDA-TSIS)

Schedule of Updated PDP 2017-2022 Consultations

Activity	Inclusive Dates
First Plan Steering Committee Meeting	May 09, 2019
Second Plan Steering Committee Meeting	November 20, 2020
Regional Consultations	Jul 04-31, 2019
National Capital Region	July 31, 2019
Region I - Ilocos	July 18, 2019
Region II - Cagayan Valley	July 19, 2019
Region III - Central Luzon	July 24, 2019
Region IV-A - CALABARZON	July 12, 2019
Region IV-B - MIMAROPA	July 04, 2019
Region V - Bicol	July 25, 2019
Region VI - Western Visayas	July 26, 2019
Region VII - Central Visayas	July 29, 2019
Region VIII - Eastern Visayas	July 31, 2019
Region IX - Zamboanga Peninsula	July 25, 2019
Region X - Northern Mindanao	July 25, 2019
Region XI - Davao	July 23, 2019
Region XII - SOCCSKSARGEN	July 12, 2019
Caraga	July 23, 2019
Cordillera Administrative Region	July 19, 2019
Bangsamoro Autonomous Region in Muslim Mindanao	July 30, 2019
Inter-planning Committee Meeting	October 14, 2019
Writershop	October 16-17, 2019
National Consultation	November 11, 2019
Online/Public Consultation	November 15-22, 2019
Endorsement to NEDA Board	December 28, 2020

NEDA Board

Rodrigo Roa Duterte
President of the Philippines
Chairperson

Karl Kendrick T. Chua
Socioeconomic Planning Secretary
Vice-Chairperson

Members

Salvador C. Medialdea
Executive Secretary
Office of the President

Karlo Alexei B. Nograles
Cabinet Secretary
Office of the President

Wendel E. Avisado
Secretary
Department of Budget and Management

Alfonso G. Cusi
Secretary
Department of Energy

Carlos G. Dominguez III
Secretary
Department of Finance

Eduardo D. Del Rosario
Secretary
Department of Human Settlements and
Urban Development

Mark A. Villar
Secretary
Department of Public Works and Highways

Ramon M. Lopez
Secretary
Department of Trade and Industry

Arthur P. Tugade
Secretary
Department of Transportation

Emmanuel F. Piñol
Chairperson - Mindanao Development
Authority

Francisco G. Dakila, Jr.
Deputy Governor
Bangko Sentral ng Pilipinas

NEDA Secretariat

Office of the Secretary

Karl Kendrick T. Chua
Socioeconomic Planning Secretary

Internal Audit Service

Roweena M. Dalusong
Director IV

Development Information Staff

Nerrisa T. Esguerra
Director IV

Corporate Affairs Group

Office of the Undersecretary

Jose Miguel R. De La Rosa
Undersecretary

Office of the Assistant Secretary

Ma. Monica P. Pagunsan
Officer-in-Charge (OIC)-Assistant Secretary

Financial Planning and Management Staff

Ma. Monica P. Pagunsan
Director IV

Administrative Staff

Danilo D. Barrameda
Director IV

Information and Communications

Technology Staff

Florante G. Igtiben
Director IV

Legal Staff

Flora Sherry Basquiñez Samañiego
OIC-Director

Legislative Executive Development Advisory Council

Mae Grace June C. Nillama
Head Executive Assistant and Supervising Officer

Legislative Liaison Office

Cristina B. Mortega
Supervising Officer

National Development Office – Policy and Planning

Office of the Undersecretary for Policy and Planning

Rosemarie G. Edillon
Undersecretary

Office of the Assistant Secretary for Policy and Planning

Carlos Bernardo O. Abad Santos
Assistant Secretary

Trade, Services, and Industry Staff

Bien A. Ganapin
Director IV

National Policy and Planning Staff

Reynaldo R. Cancio
Director IV

Social Development Staff

Girlie Grace J. Casimiro-Igtiben
Director IV

Governance Staff

Thelma C. Manuel
Director IV

**National Development Office –
Investment Programming**

**Office of the Undersecretary for Investment
Programming**

Jonathan L. Uy
OIC - Undersecretary

**Office of the Assistant Secretary for
Investment Programming**

Roderick M. Planta
Assistant Secretary

Infrastructure Staff

Kathleen P. Mangune
Director IV

Public Investment Staff

Hazel Iris S. Baliatan
Director IV

Monitoring and Evaluation Staff

Violeta S. Corpus
Director IV

Regional Development Office

Office of the Undersecretary

Mercedita A. Sombilla
Undersecretary

Office of the Assistant Secretary

Greg L. Pineda
Assistant Secretary

Regional Development Staff

Remedios S. Endencia
Director IV

**Agriculture, Natural Resources, and
Environment Staff**

Nieva T. Natural
Director IV

Cordillera Administrative Region (CAR)

Susan A. Sumbeling

Regional Director

Region I - Ilocos

Nestor G. Rillon

Regional Director

Region II - Cagayan Valley

Dionisio C. Ledres Jr.

Regional Director

Region III - Central Luzon

Gina T. Gacusan

Regional Director

Region IV-A - CALABARZON

Luis G. Banua

Regional Director

Region IV-B - MIMAROPA

Agustin C. Mendoza

Regional Director

Region V - Bicol

Agnes E. Tolentino

Regional Director

Region VI - Western Visayas

Meylene C. Rosales

OIC - Regional Director

Region VII - Central Visayas

Efren B. Carreon

Regional Director

Region VIII - Eastern Visayas

Bonifacio G. Uy

Regional Director

Region IX - Zamboanga Peninsula

Phlorita A. Ridao

Regional Director

Region X - Northern Mindanao

Mylah Faye Aurora B. Cariño

Regional Director

Region XI - Davao

Ma. Lourdes D. Lim

Regional Director

Region XII - SOCCSKSARGEN

Teresita Socorro C. Ramos

Regional Director

Caraga

Priscilla R. Sonido

Regional Director

Updated PDP 2017-2022 Secretariat

Overall Secretariat

Director Reynaldo R. Cancio
OIC-Assistant Director Desiree O. Narvaez
Domini S. Velasquez
Ivee L. Cabading
Ravina Viera A. Madrid
Rita Angela M. Rivera
John Kenneth B. Cada
Rose Margaret G. Redelicia
Maria Antonette D. Pasquin
Dainielle J. Bonete
Renz S. Torillos

Chapter 1

Lead: Undersecretary Rosemarie G. Edillon
Overall Secretariat

Chapter 2

Lead: Director Reynaldo R. Cancio
Generose B. Manlangit
Sharayah Nicole R. Dominguez

Chapter 3

Lead: Director Remedios S. Endencia
Assistant Director Cynthia A. Villena
Kristine Abbie A. Arcena
Rosauro L. De Leon
Hailey V. Meriel
Annielyn C. Rivera
William G. Sese

Chapter 4

Lead: Assistant Secretary Carlos O. Abad Santos
Overall Secretariat

Chapter 5

Lead: Director Thelma C. Manuel
Assistant Director Reverie Pure G. Sapaen
Judith V. Gondra
Mariane Genelou S. Reyes
Hazel Queen R. Sambo
Maria Angelica U. Sarinas
Genshen L. Espedido

Chapter 6

Lead: Director Thelma C. Manuel
Assistant Director Reverie Pure G. Sapaen
Joy J. Divinagracia
Michelle L. Alvarez
Rod Norbert D. Mondoyo
Karizza Mae P. Paredes

Chapter 7

Lead: Director Thelma C. Manuel
Assistant Director Reverie Pure G. Sapaen
Jazmin D. Berido
Maureen Jane B. Oreiro
Ranel Ram C. Cheng
Karen M. Resurreccion
Maria Adela T. Maputi

Chapter 8

Lead: Director Nieva T. Natural
Assistant Director Diane Gail L. Maharjan
Lenard Martin P. Guevarra
Rory Jay S. Dacumos
Reichelle C. Celorico
Ralph Camelo E. Mariano
Eunice Chloe V. Calura
Hazel Ann L. Alforja
Mary Grace C. Lapurga
Jessa Danica Villa L. Agcopra
Alvin Caesar V. Olanday
John Kenneth V. Casabal
Mark Angelo V. Cagampan
Janel Asley Z. Raviz

Chapter 9

Lead: Director Bien A. Ganapin
Ma. Millicent Joy N. Urgel
Esther O. Kinuta
Rodelyn L. Rodillas
Maria Ana Michaela R. Feliciano

Chapter 10

Lead: Director Girlie Grace J. Casimiro-Igtiben
Former SDS Director MaryAnne E.R. Darauay
OIC-Director Myrna Clara B. Asuncion
OIC-Assistant Director Edgardo S. Aranjuez II
Susan M. Carandang
Yuko Lisette R. Domingo
Xarina Dominique V. David
Michael Dominic Z. Padlan
Arlene S. Ruiz
Tomasito P. Javate, Jr.
Kevin M. Godoy
Camille F. Rivera
Denise Erika P. Señires
Director Reynaldo R. Cancio
Ivee L. Cabading
Ravina Viera A. Madrid
Maria Antonette D. Pasquin
Rita Angela M. Rivera

Chapter 11

Lead: Director Girlie Grace J. Casimiro-Igtiben
Former SDS Director MaryAnne E.R. Darauay
OIC-Director Myrna Clara B. Asuncion
OIC-Assistant Director Edgardo S. Aranjuez II
April M. Mendoza
John Anthony U. Geronimo
Yuri M. Leomo
Anna Clarissa S. Abesamis
Marie Elaine A. Ceralde
Jhoanne O. Mahilum
Carlo Lorenzo C. Reyes

Chapter 12

Lead: Director Girlie Grace J. Casimiro-Igtiben
Former SDS Director MaryAnne E.R. Darauay
OIC-Director Myrna Clara B. Asuncion
OIC-Assistant Director Edgardo S. Aranjuez II
Ramon Paul M. Falcon
Loida G. Panopio
Dennis V. Villarta
Golda P. Cainglet
Dulce B. Paloma
Aretha Janin O. Garcia
Jenno Z. Ravalo
Kenneth Casey M. Tapnio
Dianne Jade D. Calay

Chapter 13

Lead: Director Girlie Grace J. Casimiro-Igtiben
Former SDS Director MaryAnne E.R. Darauay
OIC-Director Myrna Clara B. Asuncion
OIC-Assistant Director Edgardo S. Aranjuez II
Arlene S. Ruiz
Tomasito P. Javate
Maurene Ann D. Papa
Celso S. Villaluz
Amabelle C. Quendangan

Chapter 14

Lead: Director Bien A. Ganapin
Assistant Director Richard Emerson D. Ballester
Estrella R. Turingan
Antonio Jose G. Leuterio

Chapter 15

Lead: Director Reynaldo R. Cancio
OIC-Assistant Director Desiree O. Narvaez
Rachelle Angela C. Ramos
David Feliks M. Bunao
Irene Angela V. Cuya
Ma. Clarisa P. Manzon
Melanie Grace A. Quintos
Maria Evette T. Santos
Dorothy Jane M. Obispo
Ma. Cecilia Angela D. Labadan
Laura P. Lopez
Jeremiah Louis M. Racela
Generose B. Manlangit
David Carlo C. Mangalindan

Chapter 16

Lead: Director Thelma C. Manuel
Assistant Director Reverie Pure G. Sapaen
Joy J. Divinagracia
Janice G. Utanes
Jose Carlos Alexis C. Bairan

Chapter 17

Lead: Director Remedios S. Endencia
Assistant Director Cynthia A. Villena
Mark E. de las Alas
Fresita S. Araneta

Chapter 18

Lead: Director Remedios S. Endencia
Assistant Director Cynthia A. Villena
Lemuel D. Dimagiba
Kristine M. Villarino

Chapter 19

Lead: Director Kathleen P. Mangune
OIC-Assistant Director Francis Bryan C. Coballes
Mary Ash Day O. Malimit
Aldwin U. Urbina
Criselle S. Santos
Edgar A. Basilio
Geraldine B. Bayot
Jessica Vien S. Mandi
Nathania Rae Z. Cortes
Gilbert V. Kintanar
Sheryl A. Borrromeo
Marian Mae L. Mellizas
Jose Ma. Albert H. Perez

Chapter 20

Lead: Director Nieva T. Natural
Assistant Director Diane Gail L. Maharjan
Julius A. Casabal
Mary Jane M. Dela Rosa
Jane Desiree F. Andal
Jacqueline T. Miel-Soliguin
Mary Descery Joy B. Bongcac
Carygine V. Isaac
Dorothy D. Bantasan
Roald Ray B. Taperla
Dominic E. Andrada
Nicole Faith D. Blanco
Lara Gianna V. Hidalgo

Chapter 21

Lead: Director Reynaldo R. Cancio
Generose B. Manlangit
Reynaldo B. Delos Santos, Jr.
Gretchen Leah A. Montejo
Sharayah Nicole R. Dominguez
David Carlo C. Mangalindan

Editorial Team

Secretary Karl Kendrick T. Chua
Undersecretary Rosemarie G. Edillon
Assistant Secretary Carlos Bernardo O. Abad Santos
Director Reynaldo R. Cancio
Director Nerrisa T. Esguerra

Production Team

Director Nerrisa T. Esguerra
Assistant Director Frances Fatima M. Cabana
Maria Charina I. Quiwa
Honeyleen N. Novilla
Maria Krisna B. Parrera
Patrick R. Salamat
Paul Cyril D. Torrente
Clarissa E. Escasinas
Patricia Mae A. Ching
Leslie P. Lim
Bettina B. Medina
Marifel S. Geronimo
Louise O. Garcia
Cherie Anne R. Quirante
Patricia Mae A. Ching
Geraldyn A. Rigor
Nancy R. Samonte
Judith L. Cornista
Raissa P. Angeles

Updated Philippine Development Plan 2017-2022

Published by:

National Economic and Development Authority

12 St. Josemaria Escriba Drive, Ortigas Center,
Pasig City, 1605 Philippines

Telephone: (+632) 8631 0945 to 56

Email: devinfo@neda.gov.ph

Website: <https://neda.gov.ph>

ISSN: 2243-7576

