

No. 543/QĐ-BNN-KHCN

Hanoi, date 23 month 03 year 2011

DECIDE

PROMULGATING THE ACTION PLAN FOR CLIMATE CHANGE RESPONSE OF THE AGRICULTURE AND RURAL DEVELOPMENT
SECTOR FOR THE PERIOD 2011-2015 AND VISION TO 2050

MINISTER OF AGRICULTURE AND RURAL DEVELOPMENT

Pursuant to the Government's Decree No. 01/2008/ND-CP dated January 3, 2008 stipulating the functions, tasks, powers and organizational structure of the Ministry of Agriculture and Rural Development and the Government's Decree No. 75/2009/ND-CP dated September 10, 2009 on the amendment of Article 3 of Decree 01/2008/ND-CP;

Pursuant to Decision No. 158/2008/QĐ-TTg dated December 2, 2008 of the Prime Minister approving the National Target Program on Climate Change Response;

Considering the Submission No. 01/TTr-VPBĐKH dated March 22, 2011 of the Chief Of Staff of the Standing Office of the Steering Committee of the Climate Change Adaptation Action Program on the approval of the Action Plan for climate change response of the agriculture and rural development sector for the period 2011-2015 and vision to 2050;

At the request of the Director of the Department of Science, Technology and Environment,

DECIDE:

Article 1. Promulgated together with this Decision the Action Plan for Climate Change Response of the Agriculture and Rural Development sector for the period 2011-2015 and a vision to 2050.

Article 2. Assign the Department of Science, Technology and Environment (Standing Office of the Steering Committee of the Climate Change Adaptation Action Program) to assist the Steering Committee in monitoring, guiding, examining and supervising units implementing the contents of the Action Plan.

Article 3. This decision takes effect from the date of signing.

Article 4. Chief of Staff of the Ministry, Director of Science, Technology and Environment. The Chief of the Permanent Office of the Steering Committee of the Climate Change Adaptation Action Program, the Heads of agencies and units under the Ministry, the Directors of the Departments of Agriculture and Rural Development of provinces and centrally-run cities and members of the Steering Committee of the climate change adaptation action program are responsible for the implementation of this Decision.

MINISTER

Recipients:

- As of Article 4;
- Prime Minister, Deputy General Directorate (for reporting);
- Leaders of the Ministry of Agriculture and Rural Development;
- Ministries and agencies under the Government;
- Provincial People's Committees;
- Units under the Ministry;
- Trade Unions of agriculture and rural development;
- Party Committees, Trade Unions of Ministries;
- Departments of Agriculture and Rural Development;
- Website of the Ministry, Website of the VWU;
- Member of the Program Steering Committee;
- Save: VT, Science and Technology.

Cao Duc Phat

PLAN

ACTION TO RESPOND TO CLIMATE CHANGE OF THE AGRICULTURE AND RURAL DEVELOPMENT SECTOR IN THE PERIOD OF
2011-2015 AND VISION TO 2050

(Issued together with Decision No. 543/QĐ-BNN-KHCN dated March 23, 2011 of the Minister of Agriculture and Rural Development)

I. OBJECTIVES

1.1. General objectives

Improve the capacity of the agriculture and rural development sector to respond to climate change in the period of 2011-2015 and vision to 2050, in order to minimize the level of damage caused by climate change and participate in reducing greenhouse gas emissions, ensuring

the sustainable development of sectors nationwide; protecting people's lives, preventing and avoiding natural disasters caused by climate change and sea level rise, and creating opportunities for sustainable development of the agricultural sector and rural development in the context of climate change, with emphasis on:

- Population stability and safety for cities, regions and regions, especially the Mekong Delta, Northern Plains and Central Coastal Regions;
- Stable, low-emission and sustainable agricultural, forestry, matchmaking and fishery production;
- Ensure food security and stabilize a rice land area of 3.8 million hectares, of which at least 3.2 million hectares are cultivated in two or more crops;
- Ensure the safety of the system, civil works, economic and technical infrastructure, meet the requirements of natural disaster prevention and mitigation;
- Maintain industry growth by 20%, reduce poverty by 20% and reduce greenhouse gas emissions by 20% in each 10-year period.

1.2. Specific objectives

- i) Strengthen capacity in researching and forecasting the impacts of climate change on agriculture, irrigation, forestry, matchmaking, fisheries and rural development as a scientific basis for formulating policies, strategies and solutions to reduce and adapt to climate change of the sector;
- ii) Develop a system of policies, integrate climate change with sectoral programs and specific tasks; strengthening and perfecting the organizational system, determining the responsibilities of relevant agencies and capital sources, management mechanisms for the tasks of the sector's climate change mitigation and adaptation action program;
- iii) Propose solutions and policies to support areas adversely affected by climate change for sustainable production in the agricultural sector;
- iv) Strengthen international cooperation, connect with international and regional programs, receive international assistance on experience and technology in reducing and adapting to climate change in all sectors of the sector.
- v) Develop human resources in industry activities on climate change mitigation and adaptation;
- vi) Raise awareness of cadres, civil servants, sectoral and community employees in mitigating and adapting to climate change in agriculture and rural development;
- vii) Ensure that participating organizations, individuals, communities and other actors benefit equally from climate change adaptation and mitigation activities.

2. KEY TASKS

Task 1: Assess the impacts of climate change and sea level rise on each sector of agriculture and rural development

A. Objectives

Assess the impacts of climate change and sea level rise on each sector of agriculture and rural development.

B. Contents

- i) Conducting actual surveys and surveys, using modeling tools and other modern tools to analyze and assess the impacts of climate change and sea level rise on each sector of the sector for each region and region (land, sea and islands) nationwide;
- ii) Determine criteria for assessing the impacts of climate change on each field on the basis of climate change and sea level rise scenarios;
- iii) Study the impacts of agricultural sectors on climate change factors (greenhouse gas emissions);
- iv) Propose measures/solutions for greenhouse gas emissions, construction and non-construction solutions to respond to climate change and sea level rise for each field for each region and region.

C. Main products

In-depth reports assessing the impacts of climate change on each sector of agriculture, forestry, fisheries, irrigation, matchmaking, rural infrastructure, proposing solutions to minimize the impact of agricultural production sectors on climate change;

Measures/solutions and plans to respond to climate change and sea level rise for each region and the whole country.

Task 2: Develop programs/projects for each sector of the industry suitable for specific localities to respond (mitigate and adapt) to climate change and create opportunities for industry development.

A. Objectives

Proposed programs/projects in sectors and fields of climate change response, including policies, plans, master plans, investment programs/projects of sectors and sectors.

B. Contents

- i) Assess the current state of policies, master plans and plans of sectors and sectors from the point of view of impacts on climate change and sea level rise;
- ii) Assess the current situation of population points, sectoral and sectoral infrastructures in the regions on the ability to respond to the impacts of climate change;

- iii) Proposing measures for works (new/upgrading construction) and non-works of the field and interdisciplinary sectors to respond to climate change for each period;
- iv) Propose programs/projects to formulate policies, master plans and plans of sectors in the context of climate change in the period of 2011-2015 and vision to 2050; this includes economic, financial, social and environmental feasibility analysis;
- v) Make detailed plans and implement approved programs/projects.

Recommendations for each area should focus on the following key areas:

a. For Agriculture

- Research on the planning of agricultural lands, especially rice crops in climate change conditions, in which it is necessary to pay attention to the comprehensive assessment of adaptability and forecast of the possibility of crop yield decline according to climate change scenarios suitable for 7 ecoregions;
- Shifting the structure of crops, seasonal structure and seed structure in accordance with climate change of ecological zones;
- Researching, selecting and putting into practice the production of plant varieties, livestock, greenhouse impact reductions and adaptation to climate change.
- Develop livestock with priority given to livestock breeds that are highly adaptable to a wide habitat. Linking animal husbandry with the development of the animal feed processing industry, and at the same time treating animal waste manure (biogas form);
- Completing production processes, ensuring closure from agricultural production, feed processing for animal husbandry, animal husbandry processes, waste management, suitable in climate change conditions;
- Develop plans to apply advanced technologies in the treatment of organic waste as fertilizer, reduce composting to limit adverse impacts on the environment and limit methane emissions; Take measures to thoroughly recover methane from landfills already available as fuel;
- Apply gap process in cultivation; economical use of fertilizers and pesticides; economical use of water; minimal tillage; water and fertilizer regulation techniques to limit methane generation in rice fields; adjusting the structure of crops in the direction of reducing high-emission crops, increasing bioenergy crops;
- Apply gap process in animal husbandry to improve feed utilization coefficient, reduce waste, reduce costs; apply biogas.

b. For Forestry

- Implement programs/projects to improve forest quality and forest protection capacity, especially the development of watershed and mangrove protection forests, wave protection forests, windbreakers and coastal mobile sand;
- Develop and implement management plans to combat deforestation, forest fires and forest pests; afforestation and forest enrichment;
- Develop and implement a number of coastal eco-economic models to adapt to climate change and sea level rise, especially in vulnerable areas;
- Focus on the development and implementation of a number of programs/projects related to the Post-Kyoto Protocol Mechanism on Emission Reduction from Deforestation and Forest Degradation (REDD), Decree 99/2010/ND-CP on payment of forest environmental fee services; continue to develop and implement clean development mechanism (CDM) projects, associated with the forest environmental service payment (PES) pilot program;
- Develop programs on effective use of vacant land, bare hills and mountains to create jobs for workers, eliminate hunger, reduce poverty, sedentary and settle (integrated with the desertification convention according to Decision 204/QD-TTg of the Prime Minister);
- Study and adjust the planning and management strategies of the system of protected areas of natural forests and biodiversity (integrated with the implementation of the biodiversity convention) to adapt to climate change.

c. For Fisheries

- Assess the impacts of climate change on area, productivity, aquaculture output and seafood resources. Propose solutions to cope, adapt and protect aquatic resources for each region and region when sea level rise;
- Researching and improving new farming technologies and objects; mining technologies suitable for climate change and sea level rise. Choose to create new breeding breeds that are adaptable to harsh weather conditions, highly resistant to diseases;
- Researching policies to support, develop and insure the fisheries sector in the context of climate change: Financial support policies, establishment of funds for regeneration of aquatic resources, restructuring of fisheries in coastal and offshore waters; application of new technologies to fisheries; production of artificial aquatic breeds to regenerate and restore aquatic resources;
- Implementing Decision 485/QD-TTg dated 02/05/2008 of the Prime Minister on approving the Project on protection of rare aquatic species at risk of extinction until 2015, vision 2020: period 2008-2010 pilot construction of protection zones for some endemic aquatic species, building a turtle spawning reserve in Con Dao, in the period of 2010-2015 establishing 15 protection zones for marine and coastal aquatic species, in the period of 2016-2020 establishing an additional 22-30 protection zones for rare aquatic species;
- Apply GAP in aquatic life to improve feed utilization coefficient, reduce costs; organic waste treatment; reducing costs in fishing.

d. For Irrigation

- Assessing the current status and determining the ability of irrigation systems to respond to climate change in regions;

- Strengthen the system of directing and commanding levee protection, flood and storm prevention and disaster mitigation; supplement regulations and regulations on coordination of response in emergency situations and extreme natural disasters from central to local levels. Enhance the equipment and professionalism of regional response forces when natural disasters occur; strengthening capacity in advising, directing, administering and supporting decision-making systems on early warning of natural disasters;
- Improve the capacity and level of science and technology in planning, design and construction of irrigation works. Develop irrigation solutions, management, operation and regulation processes of irrigation works, in order to avoid adverse impacts, limit damage and risks caused by climate change. Water saving in production and daily life;
- Reviewing the planning, upgrading and new construction of the system of river dikes, sea dikes and estuarine dikes to ensure the prevention of sea level rise according to the set scenarios in each phase;
- Reviewing the planning, upgrading and construction of salinity prevention works, water supply and drainage works; especially for the Red River Delta, Mekong River and coastal areas to ensure resistance to sea level rise in a phased scenario;
- Develop special support plans for residential areas, roads, public works ... in areas where floods often occur so that people have safe shelters in the flood season, especially the Mekong Delta, some central areas; relocate people from areas affected by flash floods, mountain landslides, riverine and coastal landslides that threaten people's safety;
- Develop programs to upgrade irrigation systems, dikes, flood and storm prevention, safe management of dams, and economical use of water;
- Building irrigation systems to protect coastal cities, agricultural areas and key economic zones to cope with climate change and sea level rise;
- Integrating climate change issues into the process of developing measures to ensure water security for irrigation systems, safety of sea dikes and reservoirs;
- Apply water-saving irrigation techniques such as spray irrigation, drip irrigation, shallow irrigation for rice; renovate, renovate, prevent water losses on the canal system, operate the system reasonably to increase the self-flowing area, save water pumping energy.

e. For Matchmaking

- Review investment plannings for concentrated salt production areas, clearly identify areas with great impact, and take measures to limit damage caused by climate change and sea level rise.
- Applying new science and technology in salt production to improve output and quality, contributing to improving the lives of people and reducing the stress on coastal population density;
- Invest in the infrastructure system of salt production areas including: dikes, banks, pumping stations, sewer systems, seawater supply canals, flood drainage of traffic works, inland irrigation and implement policies according to Decision No. 161/QD-TTg dated February 5, 2007 of the Prime Minister approving the salt production development planning until 2010 and 2020.

f. For Rural Development

- Reviewing rural development planning, clearly identifying areas that may be greatly affected by climate change and sea level rise;
- Strengthening rural infrastructure: Ensuring the safety of roads, schools, markets, water supply and rural sanitation works in case of climate accidents;
- Develop special support plans for residential areas in areas where floods often occur so that people have safe shelters during the flood season, especially the Mekong Delta and some central areas; migration out of areas at risk of flash floods, mountain landslides, riparian, coastal and other at-risk areas;
- Researching scientific and practical bases and proposing socio-economic development plans in dry and semi-arid areas regularly;
- Applying advanced production and processing technologies, saving energy;
- Propagating and disseminating knowledge, information, raising public awareness.

C. Main products

a. Agriculture Sector

- Sectoral programs/projects and sectors of climate change response, including: policies, plans, master plans, investment programs/projects of sectors and sectors;
- Planning the structure of crops in the conditions of climate change nationwide, ecoregions and provinces;
- Thematic report on the ability to adapt and reduce greenhouse gas emissions;
- Forecasting the transfer of farming systems in climate change conditions to regions;
- Provide plant and animal varieties adapted to climate change for each region and region.

b. Forestry Sector

- Forest development planning reports in conditions of climate change;
- Coastal eco-economic models adapted to climate change;

- Measures for the sustainable management and development of mangroves and protective forests, windbreaks and coastal sites in the context of increasing sea level rise and natural disasters;
- Programs/projects related to the Kyoto Post-Protocol Mechanism on Emissions Reduction from Deforestation and Forest Degradation (REDD); clean development mechanism (CDM) projects, associated with the forest environmental services (PES) pilot program;
- The program effectively uses vacant land, hills and mountains to create jobs for workers, eliminate hunger, reduce poverty, sedentary and settle.

c. Fisheries Sector

- Scientific reports related to new policies and technologies in protecting natural resources, farming, selecting new breeds, exploiting seafood, etc.;
- Identify aquaculture objects and seasons suitable to the weather and climatic conditions of each ecoregion to increase productivity and efficiency; exploitation and rational use of water sources actively supplied to aquaculture facilities;
- Applying biotechnology in aquaculture, applying advanced technology and high technology in breeding and seed production to minimize adverse impacts caused by climate change.

d. Irrigation sector

- Reports on investigation and assessment of the current status of irrigation systems and the ability to respond to climate change;
- New standards for modernization of irrigation systems, new technical standards in the planning and design of irrigation systems under climate change conditions;
- Irrigation solutions in which attention is paid to economical irrigation techniques (shallow exposure, rain spray irrigation, ...), the process of management, operation and regulation of the irrigation system, in order to avoid adverse impacts, limit damage and risks caused by climate change;
- Appropriate science and technology solutions such as: master planning and review of river basin master plans; change technical standards of water exploitation and use works, measures to save and effectively use water sources, maintain water protection, control water pollution, drainage, waterlogging, prevent saltwater intrusion and keep sweet; standards for design and construction safety of works.

e. Field of Matchmaking

- Reports on reviewing and supplementing salt production development plannings in the context of climate change and sea level rise;
- Well organize forms of cooperation in salt production to implement community-based management and co-management to minimize the adverse effects of erratic weather events caused by climate change;
- Supporting construction and equipment solutions in the field of matchmaking include: dikes, banks, pumping stations, sewer systems, seawater supply canals, flood drainage of traffic works, inland irrigation according to Decision No. 161/QĐ-TTg dated February 5, 2007 of the Prime Minister approving the salt production development planning until 2010 and 2020;
- New technologies in salt production in climate change conditions.

f. Rural Development Sector

- Reports assessing the current state of agricultural and rural infrastructure systems and the ability to respond to climate change;
- Measures for rural infrastructure works (new construction/upgrading) and non-construction works to respond to climate change for each stage and in accordance with the new rural construction strategy;
- Reports on analysis of the economic, financial, social and environmental feasibility of proposed programs/projects;
- Feasibility study, design and implementation of approved programs/projects.

Task 3: Raise awareness and responsibility of participation of all levels of sectors, sectors, localities and communities

A. Objectives

Raise awareness for the whole sector to understand and implement measures to respond to climate change and sea level rise.

B. Contents

- Develop documents on dissemination and propagation on climate change and its impacts with different levels and subjects;
- Develop plans to raise awareness in the sector (central and local), for sectors, communities and regions;
- Establish and train staff to carry out propaganda and awareness raising at sectoral, sectoral and local levels;
- Organizing seminars, trainings and symposia;
- Enhance the provision of information, forecasts and answers to issues on climate change and the contents of the Action Plan on agriculture and rural development in response to climate change in the period of 2011-2015 and vision to 2050 on the Website and the mass media;
- Raise public awareness and self-discipline in activities to mitigate and adapt to climate change, prevent and overcome natural disaster consequences, respond and mitigate negative impacts caused by climate change.

C. Main products

- Scientific documents and documents on climate change and its impacts on sectors of the sector;
- Training courses to raise awareness in the industry and the community about climate change at all levels from central to local levels;
- Information on the Website and mass media about climate change.

Task 4: Train and develop human resources of sectors, sectors and localities to meet climate change challenges and create development opportunities

A. Objectives

Build a force of qualified staff with deep understanding of sea level rise climate change to all sectors and response solutions.

B. Contents

- i) Propose programs and curricula on human resource training for sectors, fields and localities on climate change and response to climate change and sea level rise;
- ii) Select staffs of management agencies of local sectors and sectors to prepare for the program to improve industry capacity on climate change;
- iii) Send selected staff to participate in training programs (including masters and doctorates) specializing in climate change;
- iv) Develop curricula and introduce knowledge about climate change into curricula in training systems of sectors, fields and localities;
- v) Create conditions for senior managers of sectors, sectors and localities to attend thematic activities related to climate change on a regional and international scale (seminars, short-term training courses, regional and world conferences related to climate change).

C. Main products

- Training materials for majors with contents on climate change;
- Programs to train staff (domestic and foreign) at the central and local levels related to climate change;
- Cooperation programs with foreign countries to train specialized staff in climate change for various fields.

Task 5: Integrate climate change and sea level rise issues into action plans, policies, strategies, master plans, sectoral and local development plans.

A. Objectives

Integrate contents related to climate change into policy systems, development strategies (planning and planning) in sectors and localities.

B. Contents

- i) Formulate and promulgate documents guiding the integration of climate change contents related to action plans and policies and strategies (master plans and plans) for the development of sectors, sectors and localities;
- ii) All levels and localities shall integrate climate change contents into action plans, policies, strategies, master plans, plans, etc. in accordance with the sector's Climate Change Action Plan and the National Action Plan on Climate Change;
- iii) Evaluation of integrated implementation results of sectors, sectors and localities.

C. Main products

- A document guiding the integration of the climate change action plan of the Agriculture and Rural Development sector into the action program, plan and planning of sectors nationwide;
- Action plans, policies, strategies, planning, plans, ... has been integrated for implementation.

Task 6: Cooperate internationally with governments and international organizations to mobilize resources, knowledge, experience and funds to implement the sector's climate change response action plan.

A. Objectives

Mobilize international support resources to promote the implementation of the Action Plan, focusing on financial and technical assistance from bilateral and multilateral cooperation, global funds and from international non-governmental organizations.

B. Contents

- i) Increase participation in regional and international activities on climate change;
- ii) Participate in international science and technology research programs in the field of climate change, exchange information and experiences related to climate change with other countries and international organizations;
- iii) Develop human resources, improve professional qualifications and international negotiation skills for staff of ministries, branches and localities working in the field of climate change through domestic and foreign training courses;
- iv) Develop proposals for climate change programs/projects to call on international organizations for funding;
- v) Coordinate with the Ministries of Planning and Investment, Finance, Natural Resources and Environment in seeking non-refundable aid and loans for the implementation of climate change programs and projects or sectoral programs and projects integrated with climate change;

vi) Make plans for the exploitation and use of aid funds from multilateral funds, climate change adaptation funds of international organizations and bilateral aid from developed countries.

C. Main products

- Climate change programs/projects calling for funding from international organizations;
- Commitments of support from international organizations on the implementation of climate change response projects/programs.

Task 7: Monitoring, checking and evaluating the implementation of the objectives and tasks of the Action Plan

A. Objectives

Ensure climate change response action plans are implemented on schedule; draw on experience and propose adjustments in the development and implementation of the plan for the next phases.

B. Contents

- Formulate and organize plans and plans for monitoring, evaluating and inspecting the implementation of objectives and tasks of the Action Plan;
- Plan to supplement and adjust action plans to ensure the right goals and progress.

C. Main products

- Reports on the monitoring, evaluation and inspection of each activity;
- Conferences to evaluate and learn from experiences in implementing action plans and commendations, summarizing and disseminating replication.

Notes:

+ *The above tasks are organized in 6 areas and 7 ecoregions:*

- *Sector: Agriculture and Food Security; Forestry; Fisheries; Irrigation; Industry; Rural development;*

- *Ecoregion: Northwest; Northeast; Northern Plains; North Central; South Central; Central Highlands; Southern.*

+ *The total expected budget to perform the above 07 tasks is VND 72,402 billion, of which:*

- *Mission: VND 402 billion*

- *Investment project: VND 72,000 billion.*

+ *Units participating in the implementation: Standing Office of the Steering Committee; Units under the Ministry, Departments of Agriculture and Rural Development of provinces and cities and other related organizations and individuals, ...*

3. SOLUTIONS TO SUPPORT THE IMPLEMENTATION OF THE AGRICULTURE AND RURAL DEVELOPMENT CLIMATE CHANGE RESPONSE PLAN FOR THE PERIOD 2011-2015

3.1. Mechanisms and policies

- Reviewing, amending, supplementing and perfecting the system of legal documents and policy mechanisms to create a favorable legal basis for the effective implementation of climate change response activities;
- Implement policy mechanisms to attract resources from home and abroad to effectively implement climate change response activities;
- Encourage the development of organizations and individuals participating in consulting activities and services to support climate change response activities; focus on interagency coordination and promote the grassroots role and participation of the people.

3.2. Organization

- Building and strengthening the capacity of the network of activities on climate change response from the central to local levels of the agriculture and rural development sectors;
- Assign clear responsibilities to relevant units under the Ministry in implementing climate change response activities.

3.3. Finance

- Increase funding for the implementation of the Action Plan to respond to climate change;
- Actively seek, attract, receive and effectively implement financial funding sources and experiences of international organizations in the process of implementing climate change response activities of the sector;
- Diversify capital sources to support the implementation of the Action Plan from organizations, individuals, businesses and international organizations through bilateral and multilateral activities.

3.4. Other solutions

- Training human resources, experts, especially leading scientific experts and highly qualified state managers in climate change mitigation and adaptation of the sector;
- Promote research and application of scientific and technological advances in climate change mitigation and response;

- Strengthen coordination with ministries, sectors, research institutes, professional associations and localities in the implementation of the Action Plan;

- Strengthen the guidance, inspection, supervision and periodic evaluation of objectives, tasks, progress and results of the Action Plan.

4. IMPLEMENTATION ORGANIZATION

4.1. The Steering Committee of the Action Plan on Climate Change adaptation of the agriculture and rural development sectors shall direct relevant agencies and units to implement the action plan to respond to climate change of the sector.

4.2. The Standing Office of the Steering Committee of the Climate Change Adaptation Action Program of the Agriculture and Rural Development Sector (Standing Office of the Steering Committee for Climate Change) shall perform the following tasks:

- Compile annual plans and coordinate activities;

- Guide, inspect, supervise, urge, monitor and synthesize the development and implementation of the Action Plan to report to the Ministry.

4.3. The Department of Science, Technology and Environment shall assume the prime responsibility for, and coordinate with relevant units in, implementing the following contents:

- Submit to the Ministry for approval funding from budget funds and other sources for the implementation of the Action Plan;

- Organize the appraisal and approval of the outline and acceptance of the tasks of implementing the Action Plan on climate change.

4.4. Department of International Cooperation: actively seek opportunities for international cooperation in attracting investment, financial and technical support, capacity building, etc. implement the contents of the Action Plan; coordinate with the Standing Office of the Steering Committee for Climate Change to participate in forums, seminars, negotiations, bilateral and multilateral cooperation on climate change under the responsibility of MARD.

4.5. Department of Planning and Department of Finance: Assume the prime responsibility for, and coordinate with relevant units in, formulating plans and allocating capital sources to perform climate change response tasks.

4.6. Units under the Ministry, Departments of Agriculture and Rural Development across the country and other relevant units shall, pursuant to the Ministry's Action Plan, perform the following tasks:

- Develop, approve and organize the implementation of the unit's detailed action plan and report to the Ministry;

- Propose an annual implementation plan and send it to the Department of Science, Technology and Environment (Standing Office of the Steering Committee for Climate Change) by June 30;

- Periodic reports on the implementation of the plan are delivered annually before December 15 and unexpectedly upon request.

APPENDIX 1

LIST OF TASKS TO RESPOND TO CLIMATE CHANGE IN THE FIELD OF AGRICULTURE AND RURAL DEVELOPMENT FOR THE PERIOD 2011-2015

(Issued together with Decision No. 543/QĐ-BNN-KHCN dated March 23, 2011 of the Minister of Agriculture and Rural Development)

Tt	Task name	Content	Goal	Product	Total budget (Million VND)	Time	Implementing agency
I	Assessing the impacts of climate change and sea level rise on each sector of agriculture and rural development				109.000		
1.	The study assesses the vulnerability to climate change in the field of agriculture and rural development as a basis for developing effective policies and support activities for areas affected by climate change	<ul style="list-style-type: none"> - Building databases and maps of areas vulnerable to climate change - Develop intervention support solutions to reduce vulnerability and strengthen resilience to climate change in 7 regions 	<ul style="list-style-type: none"> - Assessing and selecting methods and criteria for assessing vulnerability to climate change in the agriculture and rural development sectors; - Assessing vulnerability to climate change in agriculture and rural development in 7 ecoregions; - Propose policies and activities to support 	<ul style="list-style-type: none"> - Methods, sets of criteria and indicators for assessing vulnerability to climate change in the agriculture and rural development sectors; - Report on assessment of vulnerability due to climate change according to the average scenario to the agriculture and rural development sectors for 7 ecoregions; - Policies and 	3.000	2010-2012	Selection

			interventions to reduce vulnerability and strengthen climate change adaptation capacity for regions.	activities to support climate change vulnerability in agriculture and rural development in accordance with the region.			
2.	Study impact assessment, identify response solutions, develop and implement action plans to respond to climate change in the fields of Agriculture and rural areas according to 7 ecoregions.	<ul style="list-style-type: none"> - Develop methods and indicators to assess the impacts of climate change according to the fields; - Assess the types and impacts of climate change; - Propose solutions and develop plans for sustainable agricultural and rural development adapted to climate change. 	<ul style="list-style-type: none"> - Develop methods and indicators to assess the impacts of climate change on agricultural and rural production activities; - Assess the impacts and impacts of climate change on agricultural and rural production; - Propose solutions and develop plans for sustainable agricultural and rural development adapted to climate change. 	<ul style="list-style-type: none"> - Methods and sets of indicators to assess the impacts of climate change on agriculture and rural areas; - Report on assessment of impacts (current and potential) of climate change on the agricultural and rural sectors in Vietnam according to 7 ecoregions; - Response solutions and implementation of action plans in the field of agriculture and rural areas; - Schemes for development of agricultural and rural sectors in the context of climate change. 	13.000	2010-2012	Selection
3.	The study proposes solutions to build sea dikes, water control works across major rivers in combination with traffic routes, coastal traffic bridges and assess the impact of water control works on sustainable development of coastal areas from Quang Ninh to Kien Giang	<ul style="list-style-type: none"> - Researching and proposing reasonable planning solutions, harmoniously combining sea dikes, water control works with coastal traffic routes; - Researching and proposing technical solutions to combine water control works with traffic bridges across major rivers; - Assess the impact of water control works on the economy, society and environment. 	<ul style="list-style-type: none"> - Proposing planning and reasonable solutions, harmoniously combining sea dikes, water control works with coastal traffic routes; - Propose technical solutions to combine water control works with bridges across major rivers; - Assess the impact of water control works on the economy, society and environment. 	<ul style="list-style-type: none"> - Reasonable planning solutions, harmoniously combining sea dikes, water control works with coastal traffic routes; - Technical solutions combining water control works with traffic bridges; - Assessing the impacts of water control works on the economy, society and environment; - Proposing solutions to minimize adverse impacts of water control works on sustainable development; - Guide technical solutions to combine water control works with traffic bridges. 	12.000	2011-2014	Selection
4.	Research on the development and application of econometric models	- Develop mathematical models for assessing the socio-economic and	Develop economic mathematical models for assessing the	- Mathematical models for assessing the socio-economic and environmental	5.000	2011-2013	Selection

	to assess the impacts of climate change on the socio-economy and environment in coastal agricultural production.	environmental impacts of climate change on agricultural production; - Develop reports on assessment of socio-economic and environmental impacts of climate change on agricultural production in the Red River Delta with quantified criteria; - Develop proposed solutions to minimize impacts.	socio-economic and environmental impacts of climate change in agricultural production and applying assessments to the Red River Delta region, thereby proposing solutions to minimize impacts.	impacts of climate change on agricultural production; - Report on assessment of socio-economic and environmental impacts of climate change on agricultural production in the Red River Delta with quantified criteria; - Proposed solutions to minimize impact.			
5.	Research and develop modeling tools to calculate and assess fluctuations in water resources in river basins under the impact of climate change and propose solutions for rational exploitation and use.	- Develop mathematical modeling tools for hydrographic and hydraulic forecasting for different regions and river basins; - Develop reports on assessment of water resources fluctuations in some river basins under the impact of climate change - Develop solutions for rational exploitation and use of water resources in river basins.	- Develop and apply mathematical modeling tools for hydrographic and hydraulic forecasting for different regions and river basins; - Assess fluctuations in the quantity and quality of water resources in some major river basins under the impact of climate change; - Propose solutions to exploit and rationally use water resources to ensure sustainable development of river basins.	- Report on assessment of water resources fluctuations in some river basins under the impact of climate change; - Solutions for rational exploitation and use of water resources in river basins.	8.000	2011-2014	Selection
6.	The study forecasts the impact of climate change on the operation of systems: irrigation, consumption, water supply and drainage and proposes solutions on planning and upgrading the construction system.	- Develop forecasts on the impact of climate change on the operation of systems: irrigation, pepper, water supply and drainage; - Develop solutions for system upgrade planning.	- Forecasting the impact of climate change on the operation of systems: irrigation, irrigation, water supply and drainage; - Propose solutions on planning to upgrade the construction system.	- Forecasting the impact of climate change on the operation of systems: irrigation, irrigation, water supply and drainage; - Solutions for planning and upgrading the system.	10.000	2012-2014	Selection
7.	The study forecasts the effects of sea level rise on saltwater intrusion, river dike systems, sea dikes and proposes solutions for planning and upgrading the construction	- Develop forecasts on the impact of sea level rise on saltwater intrusion, river dike systems and sea dikes; - Develop solutions for system upgrade planning.	- Forecasting the impact of sea level rise on saltwater intrusion, river dike systems and sea dikes; - Propose solutions on planning to upgrade the	- Forecasting the impact of sea level rise on saltwater intrusion, river dike systems and sea dikes; - Solutions for system upgrade planning	6.000	2010-2012	Selection

	system.		construction system.				
8.	Study the impacts of climate change on reservoir safety and efficiency and propose response solutions.	<ul style="list-style-type: none"> - Researching and assessing the impacts of climate change on the working of reservoirs; - Collecting data and Establishing a rationale for mitigation and adaptation solutions; - Develop technological processes for some of the key mitigation and adaptation solutions. 	<ul style="list-style-type: none"> - Assess the impact of climate change on the working of the reservoir; - Establish the rationale of mitigation and adaptation solutions; - Develop technological processes for some key mitigation and adaptation solutions. 	<ul style="list-style-type: none"> - Report on the impact of climate change on the safe and efficient working of reservoirs; - Scientific basis of solutions to respond and mitigate the impacts of climate change to ensure the safe and efficient working of reservoirs; - Guidance on assessing the impacts of climate change on the safe and efficient working of reservoirs; - Processes and technologies for some main solutions; - Applies to a specific reservoir in Central. 	3.000	2011-2013	Selection
9.	The study forecasts the effects of climate change on biodiversity, forest ecosystems and wetlands and proposes adaptation solutions.	<ul style="list-style-type: none"> - Develop forecasts of the impact of climate change on biodiversity, forest ecosystems and wetlands; - Develop adaptive solutions. 	<ul style="list-style-type: none"> - Forecasting the effects of climate change on biodiversity, forest ecosystems and wetlands; - Suggest adaptive solutions. 	<ul style="list-style-type: none"> - Forecasting the impact of climate change on biodiversity, forest ecosystems and wetlands; - Adaptive solutions. 	5.000	2012-2015	Selection
10.	Research on selecting drought-resistant forest tree varieties with high disease resistance to enhance adaptation to climate change.	<ul style="list-style-type: none"> - Develop a list of drought-tolerant plants suitable for different ecoregions; - Develop guidelines for identifying, seeding techniques and planting some high-value drought-tolerant tree species. 	Choose a group of drought-tolerant trees with high water retention and economic efficiency suitable for different soil climates.	<ul style="list-style-type: none"> - List of drought-tolerant plants suitable for different ecoregions; - A guide to identifying, breeding and cultivating certain high-value drought-tolerant plant species. 	5.000	2012-2014	Selection
11.	The study evaluates biomass and builds carbon storage baselines for different types of forests and forest lands in forest ecoregions.	Build biomass assessments and build carbon storage baselines for different types of forests and forest lands in forest ecoregions.	Assess biomass and build carbon storage baselines for different types of forests and forest lands in forest ecoregions.	Carbon storage baselines for different types of forests and forest lands in forest ecoregions.	4.000	2012-2014	Selection
12.	Study the impact of climate change on aquaculture area, productivity, output and fishing resources and propose measures to adapt and conserve aquatic	<ul style="list-style-type: none"> - Develop the impact of climate change on aquaculture area, productivity, output and fishing resources for a selected study area; - Develop measures 	<ul style="list-style-type: none"> - Assess the impacts of climate change on aquaculture area, productivity, output and fishing resources; - Propose measures 	<ul style="list-style-type: none"> - The impact of climate change on aquaculture area, productivity, output and fishing resources for a selected study area; - Measures to adapt 	6.000	2012-2015	Selection

	resources.	to adapt and conserve aquatic resources.	to adapt and conserve aquatic resources.	and conserve aquatic resources.			
13.	The study assesses the impact of climate change on people's livelihoods in areas affected by natural disasters and sea level rise (7- ecoregions) and proposes solutions to diversify livelihood sources, strengthen adaptation capacity to reduce climate change risks.	<ul style="list-style-type: none"> - Develop reports on the impact of climate change on the livelihoods of people living in areas sensitive to climate change; - Develop solutions to diversify livelihood sources and strengthen capacity to adapt and reduce climate risks to people's lives. 	<ul style="list-style-type: none"> - Assess the impact of climate change (natural disasters, rising temperatures, saltwater intrusion, degradation of natural resources, sea level rise, etc.) on the livelihoods of people in different regions; Propose solutions to diversify livelihoods, strengthen the adaptation capacity of communities to reduce climate risks. 	<ul style="list-style-type: none"> - Report on the impact of climate change on the livelihoods of people living in areas sensitive to climate change; - Solutions to diversify livelihood sources and strengthen capacity to adapt and reduce climate risks to people's lives. 	10.000	2011-2014	Selection
14.	Research and forecast the effects and impacts of climate change on the field of clean water and rural VSMT and adaptation solutions.	<ul style="list-style-type: none"> - Develop reports on analysis and assessment of the effects of climate change on water supply and rural sanitation in areas affected by climate change; - Develop solutions to mitigate the impacts of climate change on water supply and rural sanitation. 	<ul style="list-style-type: none"> - Forecasting the effects of climate change in the field of rural water supply and sanitation; - Propose solutions to mitigate impacts and enhance adaptation to climate change. 	<ul style="list-style-type: none"> - Report on analysis and assessment of the effects of climate change on water supply and rural sanitation in areas affected by climate change; - Solutions to mitigate the impacts of climate change on water supply and rural sanitation. 	4.000	2011-2013	Selection
15.	Xây dựng và triển khai một số mô hình/dự án thí điểm cho các lĩnh vực theo hướng thích ứng và giảm phát thải trong điều kiện BĐKH.	<ul style="list-style-type: none"> - Xây dựng các giải pháp; - Triển khai thí điểm một số mô hình mẫu cho các lĩnh vực theo hướng thích ứng và giảm phát thải trong điều kiện BĐKH. 	Xây dựng và triển khai một số mô hình/dự án thí điểm cho các lĩnh vực theo hướng thích ứng và giảm phát thải trong điều kiện BĐKH.	Mô hình mẫu cho các lĩnh vực theo hướng thích ứng và giảm phát thải trong điều kiện BĐKH.	10.000	2012-2015	Tuyển chọn
16.	Xây dựng cơ sở dữ liệu về BĐKH, tác động của BĐKH đến nông nghiệp, lâm nghiệp, thủy lợi, thủy sản & phát triển nông thôn.	Thu thập, tổng hợp để Xây dựng cơ sở dữ liệu về BĐKH, tác động của BĐKH đến nông nghiệp, lâm nghiệp, thủy sản & phát triển nông thôn.	Xây dựng và quản lý được cơ sở dữ liệu về BĐKH (tác động và giải pháp) lĩnh vực nông nghiệp, lâm nghiệp, thủy lợi, diêm nghiệp, thủy sản và nông thôn.	<ul style="list-style-type: none"> - Cơ sở khoa học lựa chọn các thông số dữ liệu cho từng lĩnh vực; - Ngân hàng dữ liệu về các thông số tương ứng trong các lĩnh vực; - Phần mềm quản lý, cập nhật cơ sở dữ liệu về BĐKH (tác động và giải pháp) trong từng lĩnh vực nông nghiệp, lâm nghiệp, thủy lợi, diêm nghiệp, thủy sản và nông thôn. 	5.000	2011-2015	Tuyển chọn
II	Xây dựng các chương trình/dự án đối với từng lĩnh vực của ngành phù hợp với các địa				72.000		

	phương cụ thể để ứng phó (giảm thiểu và thích ứng) với BĐKH và tạo cơ hội phát triển ngành						
17.	Rà soát, điều chỉnh quy hoạch, bảo vệ và phát triển rừng phòng hộ ven biển nhằm tăng cường thích ứng với BĐKH và nước biển dâng.	<ul style="list-style-type: none"> - Xây dựng báo cáo hiện trạng và dự báo tác động của BĐKH tới các hệ thống rừng phòng hộ ven biển; - Xây dựng các giải pháp quy hoạch, bảo vệ và phát triển rừng phòng hộ ven biển nhằm tăng cường thích ứng với BĐKH và nước biển dâng. 	<ul style="list-style-type: none"> - Đánh giá hiện trạng và dự báo tác động của BĐKH tới các hệ thống rừng phòng hộ ven biển; - Đề xuất các giải pháp quy hoạch, bảo vệ và phát triển rừng phòng hộ ven biển nhằm tăng cường thích ứng với BĐKH và nước biển dâng. 	<ul style="list-style-type: none"> - Báo cáo hiện trạng và dự báo tác động của BĐKH tới các hệ thống rừng phòng hộ ven biển; - Các giải pháp quy hoạch, bảo vệ và phát triển rừng phòng hộ ven biển nhằm tăng cường thích ứng với BĐKH và nước biển dâng. 	5.000	2011-2014	Tuyển chọn
18.	Study and review and adjust the irrigation master plan for the Red River, coastal and Mekong Delta areas in the context of climate change and sea level rise.	<ul style="list-style-type: none"> - Scientific basis for calculating changes in hydrological conditions, saltwater intrusion and drainage capacity of coastal estuaries in conditions of climate change and sea level rise; - Calculate the main parameters of nautical conditions for the overall irrigation planning for different coastal areas. 	Provide results on changes in hydrological conditions, saltwater intrusion in estuaries and coastal areas for planning calculations for different regions.	<ul style="list-style-type: none"> - Kết quả tính toán dự báo thay đổi một số các điều kiện thủy hải văn cơ bản; - Results of calculation of forecasts of saltwater intrusion for major estuaries; - The effect of sea level rise on flood drainage. 	5.000	2011-2015	Tuyển chọn
19.	Review and adjust agricultural and rural plannings in the conditions of climate change of the following regions: Red River Delta, Mekong Delta, Southeast, North Central, South Central.	<ul style="list-style-type: none"> - NC scientific basis as a guide for planning; - Solutions for agricultural and rural planning in the conditions of climate change of the following regions: Red River Delta, Mekong Delta, Southeast, North Central, South Central. 	Review and adjust agricultural and rural plannings in the conditions of climate change of the following regions: Red River Delta, Mekong Delta, Southeast, North Central, South Central.	Agricultural and rural planning in the conditions of climate change of the following regions: Red River Delta, Mekong Delta, Southeast, North Central, South Central	5.000	2011-2015	Selection
20.	Reviewing the planning of irrigation systems, dikes for flood and storm prevention and adaptation.	<ul style="list-style-type: none"> - Collect existing plans; - Study and propose planning options. 	Reviewing the planning of irrigation systems, dikes for flood and storm prevention and adaptation.	Irrigation plans, levees for flood and storm prevention.	10.000	5 years/ 1 time	Selection
21.	Develop technical regulations and standards in the fields of rural agriculture taking into account climate change.	Develop technical standards in the fields of cultivation, animal husbandry, forestry, fisheries and irrigation taking into account climate change.	Develop regulations and technical standards in the fields of cultivation, animal husbandry, forestry, fisheries and irrigation taking into account climate change.	Technical regulations and standards in the fields of cultivation, animal husbandry, forestry, fisheries and irrigation take into account climate change.	4.000	2010-2015	Selection
22.	Develop a program	Research and	Choose to create	The program selects	6.000	2012-2014	Selection

	to select and test new plant varieties adapted for areas adversely affected by climate change	establish a program to select and test new plant varieties adapted for areas adversely affected by climate change.	new plant varieties adapted to areas adversely affected by climate change.	and tests new plant varieties adapted for areas adversely affected by climate change.			
23.	Applying new technologies and materials in the construction of irrigation works and dikes to minimize the adverse impacts of climate change and sea level rise.	Apply new technologies and materials in the construction of irrigation works and dikes to minimize the impacts of climate change and sea level rise.	Proposing and testing new, suitable and highly effective technologies and materials in the construction and upgrading of irrigation works and dikes to minimize the impacts of climate change and sea level rise	New technologies and materials in the construction of irrigation works and dikes to minimize the impacts of climate change and sea level rise.	8.000	2013-2015	Selection
24.	Conservation of rare seed sources for aquaculture, especially those with poor adaptability to environmental conditions.	<ul style="list-style-type: none"> - Building sources of rare varieties with high economic and nutritional value; - Develop solutions to conserve rare varieties in climate change conditions. 	<ul style="list-style-type: none"> - Find sources of rare varieties with economic and nutritional value; - Propose solutions to conserve rare varieties in climate change conditions. 	<ul style="list-style-type: none"> - Rare seed sources with high economic and nutritional value; - Solutions to conserve rare varieties in climate change conditions. 	6.000	2012-2015	Selection
25.	Research and develop appropriate water supply and sanitation technologies in areas frequently affected by natural disasters such as floods, droughts, saltwater intrusion, etc.	<ul style="list-style-type: none"> - Develop water supply and VSMT technologies suitable for areas affected by climate change; - Develop training on technology application in the construction, management and operation of new technologies suitable to local conditions for people. 	<ul style="list-style-type: none"> - Selection and trial application of water supply and sanitation technologies for areas affected by climate change (natural disasters, storms, floods, droughts, saltwater intrusion); - Training and guiding people to use appropriate technologies, ensuring water supply and VSMT in climate change conditions. 	<ul style="list-style-type: none"> - Water supply and VSMT technologies suitable for areas affected by climate change; - People are trained to apply technology to the construction, management and operation of new technologies suitable to local conditions. 	6.000	2012-2014	Selection
26.	Establish, manage, protect, develop and sustainably use 16.24 million hectares of forestry planning land, raising the proportion of forested land to 42-43% in 2010 and 47% in 2020.	Establish, manage, protect, develop and sustainably use 16.24 million hectares of forestry planning land, raising the proportion of forested land to 42-43% in 2010 and 47% in 2020.	Provide a sustainable management, protection, development and use of 16.24 million hectares of forestry planning land, raising the proportion of forested land to 42-43% in 2010 and 47% in 2020.	Establish, manage, protect, develop and sustainably use 16.24 million hectares of forestry planning land, raising the proportion of forested land to 42-43% in 2010 and 47% in 2020	7.000	2011-2015	Selection
27.	Develop programs and projects on policies, master	Develop programs and projects on policies, master plans	Develop programs and projects on policies, master	Programs and projects on policies, master plans and	10.000	2011-2015	Selection

	plans and plans of sectors under climate change conditions for the period 2011-2015.	and plans of sectors under climate change conditions for the period 2011-2015.	plans and plans of fields in climate change conditions for the period 2011-2015.	plans of sectors under climate change conditions for the period 2011-2015.			
iii	Raising awareness and responsibility for participation of all levels of sectors, sectors, localities and communities				27.000		
28.	Disseminate and propagate to officials, civil servants, industry and community officials about climate change mitigation and adaptation.	Disseminate, propagate and thoroughly observe the guidelines and views of the Government and the sector to cadres, civil servants, employees in the sector and the community on activities to mitigate and adapt to climate change.	Raise awareness among officials, civil servants, industry officials and the community about activities to mitigate and adapt to climate change.	- Information programs and documents to propagate knowledge about natural disasters and climate change adaptation. - Dissemination and propaganda classes for cadres, civil servants, officials in the industry and the community.	10.000	Yearly	Selection
29.	Subjects and training on natural disasters and climate change adaptation for communities frequently affected by natural disasters.	- Development of training programs; - Training; - Training organization.	Training and training on natural disasters and climate change adaptation for communities frequently affected by natural disasters	Training classes on natural disasters and climate change adaptation for communities frequently affected by natural disasters.	5.000	Yearly	Selection
30.	Building community models to proactively prevent and mitigate natural disasters and adapt to climate change."	- Develop community pilot models to proactively prevent and mitigate natural disasters and adapt to climate change. - Develop guidelines for sharing experiences, replicating models to areas affected by climate change	Proposing and piloting community models to proactively prevent and mitigate natural disasters and adapt to climate change Proposal to replicate effective operating models to areas affected by climate change	Community pilot models to proactively prevent and mitigate natural disasters and adapt to climate change Guidance on sharing experiences, replicating models to areas affected by climate change	8.000	2011-2015	Selection
31.	Develop climate risk insurance policies for agriculture and credit lending policies for poor communities in areas affected by climate change	- Develop climate risk insurance policies for agriculture and provide credit loans to poor communities in areas affected by climate change	- Proposing the development of climate risk insurance policies for agriculture and credit loans for poor communities in areas affected by climate change	Climate risk insurance policy for agriculture and credit loans for poor communities in climate change-affected areas	4.000	2011-2013	Selection
Micro	Develop human resources of industries, sectors and localities to meet climate change challenges and create development opportunities				43.000		
32.	Develop programs and organize human resource training for scientific research, management of adaptation activities and mitigation of	- Develop a framework of training programs for sectoral staff on climate change mitigation and adaptation in the fields of agriculture, irrigation, fisheries,	- Develop a framework of training programs for sectoral and community officials on climate change mitigation and adaptation in the	- Report on analysis and assessment of the situation of awareness and understanding from the community to officials in activities in the fields of Agriculture and Rural	15.000	2011-2015	Selection

	climate change impacts	matchmaking, forestry and rural infrastructure; - Develop contents, plans and training organizations to serve the program framework.	fields of agriculture, irrigation, fisheries, matchmaking, forestry and rural infrastructure; - Develop contents, plans and training organizations to serve the program framework.	Development; - Report on the training needs of staff and the community; - Training program framework and training program content for different subjects.			
33.	Strengthen the organization of the steering and command apparatus, including strengthening facilities for natural disaster prevention and mitigation and climate change adaptation.	Building and consolidating organizations directing and commanding natural disaster prevention and mitigation and climate change adaptation.	- Strengthen the organization of the steering apparatus, command of natural disaster prevention and mitigation, climate change adaptation. - Strengthening material and technical facilities for disaster prevention and recovery.	- The organization of the directing and commanding apparatus for natural disaster prevention and mitigation and climate change adaptation is strengthened. - Enhanced material and technical facilities for disaster prevention and recovery.	5.000	Yearly	PCLBTW Steering Committee
34.	Policies on socialization of management, disaster prevention, climate change adaptation.	Develop policies to socialize management and natural disaster prevention.	Develop policies to socialize management, disaster prevention, and climate change adaptation.	Policies on socialization of management, disaster prevention, climate change adaptation.	3.000	2011-2013	Directorate of Irrigation
35.	Building and completing a system of integrated monitoring stations related to climate change.	Complete the system of integrated monitoring stations related to climate change.	Building and completing a system of integrated monitoring stations related to climate change.	General monitoring station system related to climate change.	20.000	Yearly	Selection
V	Integrating climate change and sea level rise issues into action plans, policies, strategies, master plans, sectoral and local development plans				101.000		
36.	Systematic review of legal documents, sectoral policies, recommendations for amendments, supplements and new promulgation of missing documents on climate change mitigation and adaptation.	Systematic review of legal documents, sectoral policies, recommendations for amendments, supplements and new promulgation of missing documents on climate change mitigation and adaptation.	The system of legal documents, policies of the industry are suitable to adapt to climate change.	Proposals to amend, supplement and promulgate new missing documents on climate change adaptation.	10.000	2011-2015	Department of Legal Affairs
37.	Develop policies to support areas frequently affected by natural disasters, disaster risk insurance policies.	Develop policies to support areas frequently affected by natural disasters, disaster risk insurance policies.	Obtain policies to support areas frequently affected by natural disasters, disaster risk insurance policies.	- Policies to support areas frequently affected by natural disasters; - Disaster risk insurance policy.	6.000	2012-2014	Directorate of Irrigation
38.	Develop policies to support the restructuring of	- Researching scientific and practical bases to develop	Obtain policies to support the restructuring of	The policy supports the restructuring of crops in the context of	6.000	2012-2015	Bureau of Horticulture

	crops in the context of climate change in agricultural ecoregions.	support policies on crop restructuring in the context of climate change; - Develop a model for crop structure transformation in 7 ecoregions; - Formulate and disseminate policies in the restructuring of crops due to the effects of climate change in agricultural ecoregions.	crops in the context of climate change in agricultural ecoregions.	climate change in agricultural ecoregions.			
39.	Develop mechanisms and policies for management, protection, development and sustainable use of forest resources and forest land.	Develop mechanisms and policies for management, protection, development and sustainable use of forest resources and forest land.	Acquire mechanisms and policies for the management, protection, development and sustainable use of forest resources and forest land.	Mechanisms and policies for management, protection, development and sustainable use of forest resources and forest land.	10.000	2012-2014	Directorate of Forestry
40.	Develop mechanisms and policies for management and sustainable development of salt production adapted to climate change.	Develop mechanisms and policies for management and sustainable development of salt production adapted to climate change.	Obtain a policy mechanism for management and sustainable development of salt production to adapt to climate change.	Mechanisms and policies on management, protection and sustainable development for salt production.	6.000	2011-2013	Department of Processing, TMNLTS and Salt Industry
41.	Develop and implement the Project on reducing greenhouse gas emissions in Vietnam's agriculture by 2020.	- Assess the current state of production, levels and developments of greenhouse gas emissions of each field of agricultural production by 2020; - Identify potential solutions that can be replicated to reduce greenhouse gas emissions; - Propose specific policies, programs and projects to promote the application of potential solutions to reduce emissions by 20% by 2020.	- Promote the development of green, low-emission agricultural production, ensure national food security and contribute to poverty alleviation. - Maintain industry growth by 20%, reduce poverty by 20% and reduce greenhouse gas emissions by 20% in each 10-year period.	- Assessment of major emission sources and levels of emissions in agricultural production; - Assess the potential to reduce greenhouse gas emissions in agriculture; - Review the master plan on the structure of livestock crops until 2020; - Calculate optimal options to reduce greenhouse gas emissions by 20% by 2020; - Identify mechanisms and policies to promote the application of solutions to reduce greenhouse gas emissions and organizational solutions for implementation.	30.000	2011-2015	Department of Science and Technology

42.	The study proposes to develop cultivation techniques, fertilizer use processes and land improvement for main crops in areas adversely affected by climate change (including the Red River Delta, Mekong Delta and Central Coastal Plains)	- Develop cultivation techniques, fertilizer use and soil improvement processes for major crops in order to minimize adverse impacts and enhance beneficial impacts in areas affected by climate change.	- Develop technical processes for cultivation, fertilizer use and soil improvement for main crops in order to minimize adverse impacts and promote the positive impacts of climate change; - Trial application of the aforementioned processes in the study areas; - Widespread dissemination of research processes to minimize adverse impacts of climate change.	Cultivation techniques, fertilizer use and soil improvement processes for major crops to minimize adverse impacts and enhance beneficial impacts in areas affected by climate change.	6.000	2011-2013	Selection
43.	Review, amend and supplement legal documents related to agriculture and rural development in order to integrate climate change in planning and rural development.	Review, amend and supplement legal documents related to agriculture and rural development in order to integrate climate change in planning and rural development.	Review, amend and supplement legal documents related to agriculture and rural development in order to integrate climate change in planning and rural development.	Promulgate legal documents related to agriculture and rural development to integrate climate change in planning and rural development.	5.000	2011-2015	Department of Legal Affairs
44.	Develop policies to support the restructuring of crops in climate change conditions in agricultural ecoregions throughout the country in the period of 2011-2015.	Develop policies to support the restructuring of crops in climate change conditions in agricultural ecoregions throughout the country in the period of 2011-2015	Develop policies to support the restructuring of crops in climate change conditions in agricultural ecoregions throughout the country in the period of 2010-2025.	- Policies to support the restructuring of crops in climate change conditions in agricultural ecoregions throughout the country in the period of 2010-2025; - Implementation process and organization.	2.000	2011-2015	Bureau of Horticulture
45.	Develop policies and institutions for livestock development to reduce greenhouse gas emissions.	Develop policies and institutions for livestock development to reduce greenhouse gas emissions.	Reduce administrative barriers and develop policies and institutions to further develop Vietnam's livestock industry in a sustainable way, reducing environmental pollution.	- Improve the system of policies and institutions for sustainable development to minimize environmental pollution impacts; - Improve policies, institutions and technical guidelines in pet waste management. Waste management standards and regulations; - Policies and institutions for private participation in the livestock development	10.000	2011-2015	Department of Animal Husbandry

				process associated with environmental protection.			
46.	Review and integrate contents of natural disaster prevention and mitigation and climate change into development plans and national target programs.	- Assessing the impacts of change on natural disaster prevention, control and mitigation; - Integrate contents of natural disaster prevention and mitigation and climate change into development plans and national target programs.	Integrate contents of natural disaster prevention and mitigation and climate change into development plans and national target programs.	The document stipulates the integration of contents of natural disaster prevention and mitigation and climate change into development plans and national target programs.	5.000	2011-2013	PCLBTW Steering Committee
47.	Develop a manual on sustainable forest management and use, including guidance on exploitation to minimize environmental impacts, development of ecotourism and agro-forestry.	Develop a manual on sustainable forest management and use, including guidance on exploitation and mitigation of impacts on the environment for the development of ecotourism and agroforestry.	Develop a set of guidelines for sustainable forest management and use, including guidelines on exploitation and mitigation of environmental impacts, development of ecotourism and agro-forestry.	A set of guidelines for sustainable forest management and use, including guidance on exploitation to minimize environmental impacts, development of ecotourism and agro-forestry.	5.000	2011-2015	Directorate of Forestry
Micro	International cooperation with governments and international organizations to mobilize resources: knowledge, experience and funding to implement the industry's climate change response action plan				35.000		
48.	Building information exchange systems, establishing bilateral and multilateral partners, sub-projects, strengthening cooperation with thematic networks on climate change.	Building information exchange systems, establishing bilateral and multilateral partners, sub-projects, strengthening cooperation with thematic networks on climate change.	Building an information exchange system, establishing bilateral and multilateral partners, sub-projects, strengthening cooperation with thematic networks on climate change.	Information exchange system, establishment of bilateral and multilateral partners, sub-projects, strengthening cooperation with thematic networks on climate change.	7.000	2011-2015	HTQT affair
49.	Develop mechanisms for mobilizing and using supporting funds and setting up funds to implement climate change adaptation programs.	Develop mechanisms for mobilizing and using supporting funds and setting up funds to implement climate change adaptation programs.	Develop a mechanism to mobilize, use support funds and set up funds to implement climate change adaptation programs.	Mechanism for mobilizing and using supporting funds and setting up funds to implement climate change adaptation programs.	8.000	2011-2015	HTQT affair
50.	Develop a financial self-reliance fund for natural disaster prevention and mitigation.	Develop a financial self-reliance fund for natural disaster prevention and mitigation.	Obtain a financial self-reliance fund for natural disaster prevention and mitigation.	Financial self-reliance fund for natural disaster prevention, control and mitigation.	10.000	2011-2015	Directorate of Irrigation
51.	Forum for cooperation in	Organizing a forum for cooperation in	Forum for cooperation in	Forum for cooperation in disaster prevention	5.000	Yearly	Directorate of Irrigation

	disaster prevention and mitigation, climate change adaptation.	disaster prevention and mitigation, climate change adaptation.	disaster prevention and mitigation, climate change adaptation.	and mitigation, climate change adaptation.			
52.	Cooperate with other countries and organizations in the country, in the region and the world on disaster mitigation and climate change adaptation.	Cooperate with other countries and organizations in the country, in the region and the world on disaster mitigation and climate change adaptation.	Cooperate with other countries and organizations in the country, in the region and the world on disaster mitigation and climate change adaptation.	Cooperate with other countries and organizations in the country, in the region and the world on disaster mitigation and adaptation to climate change.	5.000	Yearly	Directorate of Irrigation
Vii	Monitoring, checking and evaluating the implementation of objectives and tasks of the Action Plan				15.000		
53.	Develop plans and plans for monitoring, evaluating and checking the implementation of the objectives and tasks of the Action Plan.	Develop plans and plans for monitoring, evaluating and checking the implementation of objectives and tasks of the Action Plan	Develop plans and plans for monitoring, evaluating and checking the implementation of objectives and tasks of the Action Plan	Plans and plans for monitoring, evaluating and checking the implementation of the objectives and tasks of the Action Plan.	5.000	2011-2015	Office of Climate Change Management
54.	Organize the implementation of plans and plans for monitoring, evaluating and checking the implementation of the objectives and tasks of the Action Plan.	Implement plans and plans for monitoring, evaluating and checking the implementation of objectives and tasks of the Action Plan	Plans and plans for monitoring, evaluating and checking the implementation of objectives and tasks of the Action Plan are effectively implemented.	- Report on the results of monitoring, evaluation and inspection of each activity; - Plan for addition and adjustment of action plans	10.000	2011-2015	Office of Climate Change Management
	Total budget: (Four hundred and two billion)				402.000		

APPENDIX 2

LIST OF PRIORITY PROJECTS FOR INVESTMENT IN CLIMATE CHANGE RESPONSE IMPLEMENTED IN THE PERIOD 2011-2015
(Issued together with Decision No. 543/QĐ-BNN-KHCN dated March 23, 2011 of the Minister of Agriculture and Rural Development)

Tt	Program/project name	Location	Timeframes	Objectives/tasks	Expected e-commerce (billion VND)
I	PROJECT TO IMPROVE CAPACITY TO PREVENT FLOODS AND STORMS FOR COMMUNITIES IN THE PROVINCES	Central	5 years	Sea level rise prevention and disaster mitigation for the following provinces: Ha Tinh, Quang Binh, Quang Tri, Thua Thien Hue, Da Nang, Quang Nam, Quang Ngai, Binh Dinh, Phu Yen, Khanh Hoa, Ninh Thuan, Binh Thuan. Main contents: 1. Building houses to avoid storms and floods for the community. 2. Support poor households to build permanent houses. 3. Strengthening rescue and rescue equipment.	2.000
ii	FORESTRY SECTOR				4.000
1	Program "Planting and restoring mangroves and coastal protection sand barriers nationwide in the period of	3 Projects for 3 coastal areas of	6 years	Protect the sea system as well as the infrastructure system for production and people's lives in coastal areas; enhancing the biodiversity of coastal ecosystems, associated with improving	3.500

	2010-2015"	Vietnam		resilience to climate change and improving livelihoods.	
2	Cultivation and restoration of watershed protection forests in the Northwest - phase 1.	Lai Chau, Lao Cai Provinces	5 years	Improve the rate of watershed forest cover, protect land, reduce floods, stabilize water supply on the basis of linking conservation with development, harmonize socio-economic benefits - environment, ensure sustainable development. Phase 1 is concentrated in 2 provinces of Lai Chau and Lao Cai.	290
3	Strengthen the capacity of forest management and protection and forest fire prevention and fighting in Vietnam.	5 provinces	3 years	<ul style="list-style-type: none"> - Finalize legal and institutional documents on Forest Rangers; develop mechanisms, policies and financial regimes in forest protection and fire protection; - Biodiversity conservation; - Strengthen law enforcement; Strengthening capacity for forest protection management and fire protection; Propagating and educating to raise awareness about forest protection and fire protection; - Training and training in forest management and protection and fire protection and providing facilities and equipment for forest protection management and fire protection. 	210
iii	AGRICULTURAL SECTOR				5.000
1	Apply solutions to reduce greenhouse gas emissions and adapt to climate change in key rice growing areas in Vietnam.	Provinces	5 years	Support farmers to apply GAP, 3 reduce, 3 increase, crop rotation ...; investment in inland irrigation systems; support the use of new fertilizers that are safe for the environment.	1.500
2	Develop sustainable cassava production to supply raw materials for biofuel production in the period 2011-2015.	Provinces	5 years	Developing sustainable cassava production areas associated with biofuel processing systems contributes to improving land use efficiency, increasing crop productivity, and increasing economic efficiency.	1.000
3	Intensive development of sugarcane contributes to the production of biofuels.	Provinces	5 years	Exporting the raw material production system associated with ethanol processing, contributing to ensuring energy security, ecological environment and improving people's lives.	1.000
4	Expand biogas program development nationwide.	Nationally	5 years	Improving livelihoods, promoting sustainable livestock industry, providing renewable energy, reducing greenhouse gas emissions, developing a sustainable biogas industry.	1.500
iv	FISHERIES SECTOR				3.000
	Exploitation and protection of aquatic resources				2.150
1	Construction of storm shelter anchorages and fisheries logistics services (including 18 projects).	Coastal provinces	10 years	Responding to 50,000 fishing vessels operating at sea at anchor when tropical depressions or hurricanes occur; Building facilities for product consumption, developing offshore fishing, protecting resources, guiding fishing grounds, etc.	1.650
2	Development of fishing vessel safety projects and adaptive vocational management information systems.	28 coastal provinces	5 years	Contributing to completing the modern marine fisheries management information system, managing and supervising effective and safe exploitation activities.	500
	CSHT investment projects for aquaculture				850
1	Infrastructure of aquaculture areas is concentrated in Quynh Luu district.	Nghe An	3 years	Invest in the construction of infrastructure works in high-yield intensive shrimp farming areas, ensuring sustainable development and waterlogging prevention.	64
2	Cam Binh concentrated cage lobster farming area infrastructure.	Khanh Hoa	3 years	Forming a centralized cage lobster farming area in the form of high-yield industrial shrimp farming, creating raw materials for seafood export, development in tandem with environmental protection and ensuring sustainability.	11

3	Invest in building infrastructure in Hoang Xa concentrated aquaculture area.	Phu Tho	5 years	Invest in building infrastructure in safe, high-yield, and flood-resistant concentrated farming areas.	115
4	Industrial shrimp farming infrastructure is concentrated in Thanh Hoa province.	Thanh Hoa	5 years	Invest in upgrading the infrastructure of industrial shrimp farming areas in Thanh Hoa province to meet technical requirements for intensive whiteleg shrimp farming and climate change adaptation.	150
5	Infrastructure of Nghi Xuan concentrated aquaculture area	Ha Tinh	5 years	Investment in infrastructure for aquaculture is concentrated in the direction of sustainability, water supply, and flood protection.	150
6	Invest in building infrastructure in Thanh Phu concentrated aquaculture area.	Ben Tre	5 years	Building irrigation systems, transport systems and technical infrastructure for aquaculture development.	150
7	Building infrastructure for marine aquaculture concentrated in Kien Giang.	Kien Giang	3 years	Investment in marine farming infrastructure is focused on sustainability, high productivity, and climate change adaptation.	70
8	Building infrastructure in Khanh Hoa concentrated marine farming area.	Khanh Hoa	3 years	Investment in marine farming infrastructure is focused on sustainability, high productivity, and climate change adaptation.	70
9	Building infrastructure in Quang Ninh concentrated marine farming area.	Quang Ninh	3 years	Investment in marine farming infrastructure is focused on sustainability, high productivity, and climate change adaptation.	70
V	FLOOD PROTECTION WORKS FOR URBAN AREAS, CONCENTRATED RESIDENTIAL AREAS				25.000
1	Improve drainage capacity in the west of Hanoi.	Hanoi	5 years	- Drainage against waterlogging for the inner city and the west of Hanoi city; water consumption against waterlogging in rural residential areas and industrial zones; protection of agricultural production. - Main category: Construction of Yen Nghia pumping station (120m ³ /s).	4.000
2	Irrigation for flood control in Ho Chi Minh City	Ho Chi Minh City	5 years	Building irrigation systems to combat flooding in Ho Chi Minh City, protect people's lives, serve the development of agriculture and fisheries, suitable for long-term development, adapt to climate change conditions - sea level rise, ensure environmental protection requirements and sustainable development. Tidal control aims to lower the tidal level on the axial channels surrounding urban areas in order to enhance the drainage capacity of the urban drainage system located on low terrain, gradually reduce waterlogging and improve the environment for these areas. Main items: 1. Completing the Saigon River dike system. 2. Construction of large-scale tidal culverts. 3. Dredging the drainage shaft channel system. 4. Construction of regulatory lakes.	6.000
3	Irrigation for flood protection for other cities: Hai Phong, Can Tho, Ca Mau, Vinh Long	Hai Phong, Can Tho, Ca Mau, Vinh Long	5 years	Building irrigation systems for flood control in the cities of Hai Phong, Can Tho, Ca Mau, Vinh Long, protecting people's lives, serving the development of agriculture and fisheries, suitable for long-term development, adapting to climate change conditions - sea level rise, ensure environmental protection and sustainable development requirements. Tidal control aims to lower the tidal level on the axial channels surrounding urban areas in order to enhance the drainage capacity of the urban drainage system located on low terrain, gradually reduce waterlogging and improve the environment for these areas. Main items: 1. Completing the river dike system. 2. Construction of large-scale tidal culverts. 3. Dredging the drainage shaft channel system. 4. Construction of regulatory lakes.	15.000
Micro	MIGRATION TO HIGH-RISK DISASTER AREAS IN 14 PROVINCES	15 References	5 years	Prevent natural disasters, ensure sustainable livelihoods	1.000
Micro	CONSOLIDATE AND UPGRADE THE SYSTEM OF RIVER DIKES AND SEA DIKES				10.000
1	Investment program to strengthen and upgrade the Tonkin and North Central	Tonkin + North	5 years	Prevention of sea level rise, mitigation of natural disasters.	4.000

	river dikes.	Central	ars		
2	Investment program to strengthen and upgrade sea dikes from Quang Ninh to Quang Nam	Provinces from Quang Ninh to Quang Nam	5 years	Prevention of sea level rise, mitigation of natural disasters.	2.910
3	Investment program to strengthen and upgrade sea dikes from Quang Ngai to Kien Giang	Provinces from Quang Ngai to Kien Giang	5 years	Prevention of sea level rise, mitigation of natural disasters.	3.090
VII	SUPPORTING THE NATIONAL TARGET PROGRAM ON RURAL WATER, SANITATION AND HYGIENE				1.000
1	Rural clean water supply project in some central coastal provinces	Phu Yen, Khanh Hoa, Ninh Thuan and Binh Thuan	5 years	Provide drinking and living water for people in water-disadvantaged areas.	650
2	Rural Water Supply and VSMT Component - Climate Change Adaptation Project in the Mekong Delta.	Can Tho, Ca Mau, Ben Tre and Dong Thap	5 years	Water supply and rural sanitation to localities salinized by sea level rise.	350
Ix	PROGRAM OF COMPLETING, UPGRADING AND CLOSING IRRIGATION SYSTEMS				10.000
1	Irrigation system between Tien River - Hau River (including Nam Mang Nhut system).	Vinh Long, Tra Vinh	10 years	<p>- Control salinity for about 30,000 hectares located in the affected area of 4g / l and improve the capacity of irrigation and waterlogging for about 60,000 hectares of Vung Liem (Vinh Long) and Xiao Can and Cang Long districts (Tra Vinh). Improve domestic water supply conditions for people in the region. Preventing tides, preventing salinity, supplying irrigation water and consuming water for the Vung Liem river basin in particular and the Nam Mang Nhut region in general in the context of climate change - sea level rise.</p> <p>- Main contents: Construction of Vung Liem, My Van, Bong Lot, General Inventory Dredging the section bordering Mang Nhut River, first-level canals connecting to Vung Liem River include: Bung Truong canal, General Phi canal, Phop rattan canal; Upgrade the line about 10km long along The Co Fry River in 2 communes of Trung Thanh Tay and Que An (Vung Liem). Construction of level 2 regulatory sewer system: Upgrade the dike line about 10km long along Co Fry River in Trung Thanh Tay and Que An communes (Vung Liem). Construction of a level 2 regulatory sewer system.</p>	800
2	Irrigation system in Dong Thap Muoi area	Long An, Dong Thap	10 years	Prevent flooding across the border from entering the EIA center at the beginning and end of the season to reduce flooding for the EIA inlands to ensure stable production of 2 crops of EIA and cooperative rice in deep flooded areas and 3 crops in shallow flooded areas. Reduce the loss of people and property of the people and the state, reduce the cost of building infrastructure and arranging the population. Create conditions to increase the amount of silt from the Tien River into the interior of the areas of Long An province, coordinate with relevant sectors to form the N1 route, residential routes along the border, water transport routes and protect the southwest border security of the Fatherland. Main contents: Flood barrier levee line. Water supply channel, leading to flood drainage Two Eight. Two September flood control works, Resistance, Binh	1.000

				Thanh, Thong Nhat, Cai Cai, Tan Cong Chi. Water supply culvert, preventing Sa Trai flood, Tan Thanh, Cai Bat, Tan Hung, Moon River.	
3	Long Xuyen Quadrangle irrigation system	An Giang, Kien Giang	10 years	<p>- Control salinity, sweetness, waterlogging for about 50.00 hectares of Chau Thanh, Tan Hiep and Rach Gia districts. Improve domestic water supply conditions for people in the area, especially for Rach Gia City.</p> <p>- Tide prevention, salinity prevention, irrigation water supply and water consumption for the region in particular and for the TGLX region in general in the context of climate change sea level rise. Main contents: Construction of culverts at the end of Rach Gia - Long Xuyen canal (about 60m), Round canal (about 20m) and grade II canals connecting to Cai San canal; Dredging the Rach Gia - Long Xuyen canals, round canals; Dredging the regulatory sewer system level 2.</p>	200
4	Irrigation system in Ca Mau Peninsula (including O Mon Xà No irrigation system, Phung Hiep Highway).	Kien Giang, Ca Mau, Bac Lieu, Hau Giang	10 years	<p>- Building irrigation systems to meet the production requirements of agriculture, forestry and fishery on the basis of the planning for transformation of the economic structure of agriculture, forestry and fishery to 2020, suitable for long-term development, adapting to climate change conditions of sea level rise, ensure environmental protection and sustainable development requirements. Complete irrigation system provides enough fresh and salty water for 1.2 million hectares of cultivation. Control and effective use of floodwaters for 1 million hectares west of Hau River. Residential and industrial water supply. Develop a management and operation regime of the construction system to ensure that it serves the production of industries and uses water resources effectively.</p> <p>- Main contents: 1. Completion of O Mon - Xà No HTTL (construction of grade II culverts, dredging of grade II channels). 2. Management Lo - Phung Hiep salty demarcation system (completion of mobile barge dams). 3. Completing The Bi culvert, investing in the construction of The Ro Shovel culvert. 4. Upgrade sea dikes. 5. Dredging the shafts to get water from the Hau River. 6. The Big One - The Little culvert and lock. 7. Irrigation system for fisheries. 8. Complete inland hydro-agricultural system. 9. Building an automatic monitoring system (SCADA).</p>	1.000
5	Ben Tre North Irrigation System	Ben Tre	10 years	<p>- Ensure fresh water sources for production and daily life of 900,000 people, in 4 districts and cities in the north of Ben Tre province; improve the water environment and improve the quality of life of people in the region. Increase the production of food, crops and livestock to address local needs. Strive to achieve the target of 360,000 tons of rice, ensuring that the per capita level by 2010 is 350kg/person/year. Serving the socio-economic development strategy of Ben Tre province: average growth of 9.5% / year.</p> <p>- Main contents: Key works: Ba Lai dam culvert, An Hoa culvert - lock, Ben Tre culvert, Ben Ray culvert, Ba Lai upper canal. The system of saltwater barriers and works under the dikes, including: Ham Luong river (Left dike), My Tho river (Huu dike), East coastal, culverts under the dike (Tan Phu, Thu Cuu, Son Doc 2, Dinh Trung, 27 canalhead culverts, 2 regulating culverts. Level 1 channel system: About 240 km of channel. System of inland irrigation works.</p>	1.000
6	Repair and upgrade of Tan An system - Stone Dam.	Binh Dinh	5 years	<p>- Irrigation, waterlogging, flood protection, salt prevention and sweetness for 16,000 hectares of cultivation in and around Tan An Dam Da area: Responding to climate change conditions, sea level rise creates fresh water sources for 14,020 hectares of Tan An - Dam Da area and industrial and urban development of districts: Phu Cat, An Nhon, Tuy Phuoc and Quy Nhon City</p> <p>- Main contents: Exalt all overflow thresholds, drains of the entire system from (0.33 - 0.45)m, replace collapsible devices, valve doors.</p>	150

7	Waterlogging, flood drainage, landslide prevention in the lower Thoa River.	Quang Ngai	5 years	<p>- Waterlogging and drainage, prevention of early floods, late floods and minor floods, preventing salinity, keeping sweet to ensure agricultural production of 2 crops; anti-riverbank landslides; adapt and coexist with the main floods, stabilize and improve the lives of people in the project area.</p> <p>- Main contents: Dredging extends the main axle section about 28km long; straightening the 2 sections of the Thoa River; dikes from K6+322 to K28+117 (21.8km long); anti-erosion embankments of some sections of the main pepper shaft with a total length of 2.2 km by gabion on geotextiles; construction of 84 regulatory works on the main pepper shaft including 4 dams, 56 drains draining water from copper into the canal, 14 local pepper pumping stations and 10 traffic bridges.</p>	350
8	Renovation of Ninh Hoa Dai HTTL, Quang Dien district.	Thua Thien Hue	5 years	<p>- Ensure fast flood drainage without causing waterlogging, thoroughly prevent minor floods and early floods for 4,400 hectares of summer-autumn agricultural land for Sam And 6 communes. Ensure stable irrigation in the dry season. Reducing waterlogging time for the project area when there is a flood to improve the ecological environment contributes to gradually improving the lives of people in the project area. Combining reinforcement to upgrade the riverbank into a civil transport system and inland traffic.</p> <p>- Main contents: Dredging and expansion of balds combined with new construction of 02 drains; Upgrading the right bank, the left bank of the Bo River; Upgrading the reinforced Bald Dike Yan Hong Dredging combined with the shoreline into roads; Expand 02 drains Build 07 irrigation pumping stations.</p>	190
9	Upgrading the irrigation system of the Garbage River lake channel	Ha Tinh	5 years	<p>- Consolidate the canal system of The Garbage River to ensure water supply according to the design task. Ensure sufficient irrigation water for 8,150 hectares of arable land and provide domestic water for people around the region.</p> <p>- Main contents: Solidify main channels and level 1 channels. + The main channel reinforces the trapezoidal cross-section channel with BTCT, 2 banks as a road to manage operation. + Level 1 channel: Rectangular cross-sectional channel using BTCT. + Project management equipment.</p>	250
10	Renovate and upgrade Bai Thuong HTTN.	Thanh Hoa	5 years	<p>- Ensure water supply for irrigation of 49,800 hectares and domestic water supply for people in the region, especially thanh Hoa city and other towns in the districts passing through.</p> <p>- Main contents: Repair, upgrade, the following canal routes: The main channel is 19.3 km long; The North Main Channel is 54 km long; The South Main Channel is 37 km long; Channel C6 and channel N8 with a total length of 53km; Some other level 2 canals with a total length of 137 km.</p>	450
11	SCNC north-south ha irrigation system.	N. Dinh, H. South	5 years	<p>- Proposing solutions for irrigation development to meet the needs of water supply for production restructuring, economic restructuring, especially from rice cultivation to aquaculture, industrial crops, fruit trees with high economic benefits, drainage and flood prevention, disaster mitigation, ecological environment protection ... towards sustainable development, effective use of land and water resources. Ensure the sustainable development of water supply sources for agriculture and economic sectors, drainage, flood prevention and mitigation of natural disasters to meet socio-economic development requirements in the period of 2008-2010 and until 2020.</p> <p>- Main contents: 1. Renovation and upgrading of 30 culverts under dikes of all kinds. 2. Renovate and upgrade 14 pumping stations. 3. Solidify the irrigation canal system of grade I, grade II and III. 4. Build 12 new pumping stations. 5. Dredging the canal system. 6. Upgrade the dikes in the system.</p>	300

12	SCNC north Hung Hai irrigation system.	H. Yang, H. Yen. B. Ninh, H. Noi	5 years	<p>- Invest in repairing and upgrading works in the system to ensure the task of creating water supply for 109,978 hectares of rice and industrial crops; water supply for livestock and poultry farming, 21,000ha of aquaculture. Creating water supply for more than 3 million people, industrial parks and handicraft production facilities about 4,240ha. Waterlogging for 192,045 hectares in dikes, protecting agricultural production, economic and residential facilities. Maintaining the flow to minimize pollution, deplete water sources, protect the ecological environment, respond to the impacts of climate change, contribute to stabilizing people's lives in the region.</p> <p>- Main contents: 1. Dredging of spindle rivers. 2. Rebuilding Cau Xe, repairing An Tho culvert. 3. New construction of culverts to draw water from the Red River. 4. New construction of culverts and pumping stations to take water from the Boiled River. 5. Repair and upgrade the CTTL and dikes in the system.</p>	850
13	Repairing and upgrading pumping stations and irrigation systems in Tan Yen, Viet Yen and Hiep Hoa districts of Cau River Cooperative, Bac Giang province.	Bac Giang	5 years	<p>- Ensure the irrigation and consumption needs of the system including Hiep Hoa, Viet Yen, Tan Yen districts of Bac Giang province; Improve the efficiency of focal irrigation pumping stations, ensure safety during operation for agricultural production.</p> <p>- Main contents: Self-flowing irrigation system: Solidification of 46.6 km of canals (grade I canal: 21.1 km; channel grade II: 25.5 km), irrigation of 7,691 ha; Dynamic irrigation system; Renovating and upgrading 04 irrigation pumping stations for 2 districts of Viet Yen and Tan Yen and 10 km of canals (TB: Truc Nui, Gia Son, Huu Nghi, Lien Chung), pepper 728 ha; irrigation of 691 hectares; Built 2 operating buildings with an area of 1920m2.</p>	200
14	Other irrigation projects.				
14.1	Repair and upgrade clusters of Pac Ta, Muong So, Noong Canyon, Thèn Sin, Ho Bid, Binh Lu, Ban Bo, Muong Kim, Muong Than	Lai chau	5 years	Irrigation water supply for about 2500 hectares of rice in some communes in Tan Uyen, Phong Tho, Sin Ho, Tam Duong and Than Uyen districts.	100
14.2	Construction of Huoi Crack Lake, Huoi State Tai.	Dien Bien	5 years	Provide irrigation water for 200 hectares and supplement water supply for Nam Navel canal system.	200
14.3	Construction of Van Lang reservoir	Taiyuan	5 years	<p>- Additional seasonal water supply for The Waterfall Irrigation System to ensure irrigation of 25,100ha of arable land; Regulate water to ensure minimum flow in the Bridge River after the Waterfall Dam, improve the regional ecological environment; Flood reduction for Thai Nguyen city; Combined power generation; lakebed aquaculture; create tourist landscapes.</p> <p>- Main contents: Construction of a reservoir with a total capacity of about 100.6 million m3.</p> <p>The focal point is built in Van Lang commune, about 2.0km downstream from the confluence of cau river and Cai stream, about 30-35km west - south of Thai Nguyen city. Additional irrigation water supply capacity for 25,100 hectares of arable land under the Waterfall Canh hydro-agricultural system, ensuring the minimum flow in the Bridge River behind the Waterfall Dam is about 6.7 m3/s to improve the ecological environment of the area, combining power generation with an installed capacity of about 15MW.</p>	900
14.4	Renovating and upgrading Truc Tay pumping station	Bac Giang	3 years	Waterlogging for 8,276ha of catchment areas, of which 3,604ha of industrial and urban parks according to the new target 2008-2015.	100
14.5	Repair and upgrade Lien Son dam.	Vinh Phuc	3 years	Ensuring the safety of the project, together with Dai Dinh and Bach Hac pumping stations, ensuring irrigation for over 20,000 hectares of Vinh Tuong, Yen Lac, Lap Trach, Vinh Yen, Tam Duong districts and 1 part of Me Linh district (Hanoi); Solve the problem of irrigation water for nearly 1,000 hectares of arable land after the downstream of Lien Son Dam.	200

14.6	Renovate and upgrade Phu Sa pumping station	Hanoi	3 years	<ul style="list-style-type: none"> - Water supply for over 20,000 ha/3 crops of 04 districts under the system; - Support irrigation of a part of the irrigation area of Dong Mo irrigation system; - Water supply to serve the population, economy and other water needs in the system. 	200
14.7	Upgrading and dredging Co Le - Ba Nu canal of Nanning hydro-agricultural system	Nam Dinh	3 years	Ensure proactive irrigation of 1,700 hectares of arable and pepper land for 2,823 hectares of natural land in 8 communes of Nam Thanh, Nam Loi, Nam Hai (Nam Truc district); Co Le Town, Middle East, Truc Tuan, Truc Dao, Truc Thanh (Truc Ninh District); In addition, there is also the task of serving the people and improving the environment, preventing encroachment, improving the material and cultural life of the people in the region.	50
14.8	Repairing and upgrading the system of pumping stations of Substance Thanh, Quy Hau, Kim Son district.	Ninh Binh	3 years	Ensure water consumption for 2,918ha (of which 1,500 ha is arable land) in 11 communes. Ensure rice transplantation of 2 solid crops, serving agricultural production in the direction of intensive farming, increasing crops, increasing crop productivity, improving environmental hygiene in the project area.	100
14.9	Dredging and urgently renovating the Tien Hoang main canal for Yen Khanh and Kim Son districts.	Ninh Binh	3 years	Pepper pump for 4,354ha of natural land area in Yen Khanh district and part of Kim Son district; Provide irrigation water for 2,613ha of arable land for agricultural production and environmental sanitation in the project area.	80
14.10	Nam Work irrigation system, Que Phong district, Nghe An province.	Nghe An	3 years	<ul style="list-style-type: none"> - Providing irrigation water for 640 hectares of agricultural land; Livestock development (buffalo: 2,849 heads, cows: 642 heads, pigs: 2,779 heads; poultry 26,556 heads, fish 23 tons); - Tourism: Promote the natural landscape of Sao Va waterfall available in combination with irrigation projects to exploit tourism resources. 	130
14.11	Construction of Suoi Cai Tan Hien lake in Phu Hoa district, Son Hoa.	Phu Yen	5 years	Improve the level of ensuring irrigation, consumption and reservoir safety in climate change conditions.	250
14.12	Repair and upgrade The Grinding Stone Lake.	Khanh Hoa	3 years	Improve operational efficiency, irrigation assurance level for 198 hectares, reservoir safety in climate change conditions.	100
14.13	Dak Long, Dak Ro Gia, Dak Ro Net.	Kon Tum	3 years	Improve operational efficiency, irrigation and consumption assurance levels in climate change conditions.	100
14.14	Dat Lan Reservoir	Lin Dong	5 years	Build Da Lan reservoir and irrigation canal system for 1118 hectares of arable land and create domestic water sources for people in the region.	250
14.15	Da Su Lake	Lin Dong	5 years	Build a water reservoir and irrigation canal system for 1514 hectares of arable land and create domestic water sources for people in the region.	250
14.16	Sea Lac - Ham Tan water supply channel, Tanh Linh district and Ham Tan district	Binh Thuan	5 years	<ul style="list-style-type: none"> - Water supply for 1,500ha of agricultural land in Ham Tan district; - Supply untreated water to 2336ha of Tan Duc industrial zones (900ha), Tan Phuc (800ha) and Son My (636ha, through the addition of water to Song Dinh 3 lake); - Supply untreated water to residential areas and services serving a business area of 120,000 people. 	250
X	IRRIGATION WORKS FOR NTTs				1.000

1	Building infrastructure of aquaculture areas in low-lying fields in Nho Quan, Gia Vien and Hoa Lu districts, Ninh Binh province.	Ninh Binh	5 years	Build complete infrastructure for aquaculture for about 1,200 hectares of low-lying fields of Nho Quan (500ha), Gia Vien (400ha) and Hoa Lu (300ha) districts.	120
2	Upgrade HTTL to serve nttts in the western area of Long Xuyen city bypass road.	An Giang	5 years	Upgrading HTTL for separate water supply and drainage for 1265 hectares of nttts	230
3	Upgrading the cooperative for pangasius farming concentrated in Cao Lanh district, Chau Thanh.	Dong Thap	5 years	Upgrading water supply and drainage for 942 hectares of nttts	150
4	Upgrading HTTL to serve subregion III Nam Ca Mau.	Ca Mau	5 years	Upgrading HTTL to supply and drain water for 7,420 hectares of nttts.	150
5	HTTL serves Tan Browser, Dam Bat district.	Ca Mau	3 years	Upgrading water supply and drainage for 4,907 hectares of nttts	100
6	Upgrading the HTTL to serve the nttts in Ban Vu Lo area - Cau Ngang district.	Tra Vinh	3 years	Upgrading the HTTL to provide separate water supply and drainage for 1080 hectares of nttts.	100
7	Construction of industrial and semi-industrial shrimp farming areas in Long Dien Dong commune, Long Dien Tay district, Dong Hai district.	Bac Lieu	3 years	Upgrading HTTL for separate water supply and drainage for 5250 hectares of nttts	150
Por	CONSTRUCTION OF ESTUARINE WORKS, SALTWATER CONTROL, TIDAL PREVENTION				5.000
1	Hoa River Dam	Peace	10 years	<p>- Prevent salinity, keep sweet, create irrigation water supply for about 8,500 hectares of arable land on both sides of the Hoa River. Water supply for about 3,700ha of aquaculture in Vinh Bao, Thai Thuy and Quynh Phu districts, ensuring flood drainage and water traffic conditions on the Hoa River. Combining foot traffic bridges on coastal economic routes.</p> <p>- Main contents: Stone dams, culverts, locks and combined traffic bridges. The focal dam is located at the location of the pier across the Hoa River in the 12th hamlet of Vinh Tien commune. The dam is connected from the culvert to the left bank of the Hoa River. Flood drains and locks are located on the right bank of the Hoa River.</p>	200
2	Tra Ly Dam	Peace	5 years	<p>- Prevent salinity, keep sweet, create irrigation water supply for about 19,000 hectares of arable land on both sides of Tra Ly River. Create fresh water sources for about 370,000 people and economic sectors of Thai Binh province. Ensure flood drainage and water traffic conditions on Tra Ly River. Combining foot traffic bridges on coastal economic routes.</p> <p>- Main contents: Earthen dams, culverts, locks and combined traffic bridges; The focal dam is located in Dong Quy commune, Tien Hai district; The dam is connected from the culvert to the left bank of the Tra Ly River; Flood drains and locks are located on the right bank of the Tra Ly River.</p>	350
3	Han Dam.	Haiphong	5 years	<p>- Preventing salinity, keeping sweet ensures irrigation water for more than 10000 hectares of arable land on both sides of Thai Binh River and water supply for about 2,500 hectares of aquaculture in Tien Lang and Vinh Bao districts - Hai Phong city. Ensure the combination of land traffic through the Han dam of the axis TL 211 - TLD - TL 39 B (Kien An - Tien Lang - Vinh Bao - Hai Phong and Thai Thuy - Thai Binh). Combined to ensure water traffic for small and medium-sized boats traveling on the Thai Binh River. Ensure flood drainage during the stormy season.</p>	400

				<p>- Main contents: Focal works: dams, regulatory culverts, locks, bridges over the river, dredging Thai Binh River. Supply fresh water to the project area through culverts under dikes along the upper Han Dam on the Thai Binh River. + Drain to collect water on the left bank of Thai Binh River: water supply for the South of the New River. + Culvert on the right bank of Thai Binh River: supplying water to the northeast of Vinh Bao sewer system and canal.</p>	
4	Lèn River Dam	Thanh Hoa	5 years	<p>- Prevent salinity and keep sweet to supply pumping stations built in the operating area with sufficient irrigation capacity for more than 24,000 hectares of winter-spring and summer-autumn crops, including more than 3,000 hectares of coastal saltland and domestic water supply for 250,000 people in coastal areas, improve water quality. Regarding flood removal: Returning almost to the status quo the ability of the Lèn River to remove floods, limiting the rise of the flood level before the dam so as not to affect the drainage of inland rivers, avoiding the need to raise the levees of existing inland rivers.</p> <p>- Main contents: Flood drain with 2-way opening and closing regulatory doors (14 doors). Locks. Dam blocking the Lèn River. Locks on the De canal side. Fresh water supply system for 5 communes in Hau Loc sea area.</p>	600
5	Repair and upgrade of Ben Thuy culvert	Nghe An	3 years	<p>- Waterlogging, flood protection, salt prevention, sweet keeping about 30,000 hectares cultivated in the region and ensuring water transport.</p> <p>- Main contents: Upgrading and repairing all 10 sewer doors (expanding apertures, replacing valve door opening and closing devices, etc.).</p>	100
6	Hieu River salinity prevention works.	Quang Tri	5 years	<p>- Prevent salinity, keep sweet to create water sources to supply irrigation water for 2400 hectares of arable land of communes: Cam Thanh, Cam Hieu, Cam Thuy, Cam Thanh, Cam An in Cam Lo district and Dong Thanh ward of Dong Ha city, domestic water for more than 25,000 people on both banks of Hieu River and for cement factory 60 thousand tons / year, combining traffic (connecting people on both banks including 03 communes, wards north of the river and 02 communes and wards south of the river), creating an environmental landscape while maintaining flood drainage in the upper reaches of the Hieu River dam as it is now.</p> <p>- Main contents: Construction of a spillway 105m long, with 07 gates and 01 lock. Construction of a 10m wide overflow bridge and a road connecting the two banks of the river. Construction of 02 irrigation pumping stations: Quat Xa and Lam Lang.</p>	300
7	Dam downstream of Dinh River	Ninh Thuan	5 years	<p>- Preventing intrusion due to tidal effects on the land on both sides of the Dinh River; Forming a freshwater reservoir with a capacity of about 04 million m³ of water to provide water for production and daily life for residents along the banks of the Dinh River; Contributing to improving the environment and climate of Phan Rang Thap Cham city area; Meet the requirements of tourism development; there is a combination of transport for urban development.</p> <p>- Main contents: Construction of dams downstream of Dinh River on a 500 m wide river section 1.8km from Dao Long Bridge towards the sea, including the following categories: Reservoir surge dam; Damper door; Locks; Road traffic bridges arranged on the dam; Construction management area.</p>	350
8	And river sewer system.	Long An	10 years	<p>- Operate the construction system to control salinity, keep sweet to provide fresh water to the upstream area of Vam Co sewer. Enhance drainage capacity to reduce waterlogging caused by rain, flooding, polluted water consumption, alum acidity, salinity ... to ensure improved soil and water environmental conditions, to exploit the benefits and minimize damage from flooding in the basin. Prevent high tides and sea level rise in disaster prevention, ensure production safety and people's lives in the project area. Combining</p>	1.000

				<p>the tasks of developing ministerial and water transport in the project area.</p> <p>- Main contents: Vam Co sewer project with an expected aperture of 500-600m located in the estuary area, after the confluence of 2 Vam Co rivers. Axis channel system, grade I with a distance between channels density 3-5km/channel, Bđy about 10-30m, bottom height from -3 to -4m. The system of irrigation works at all levels and inland serves the development of agricultural and fishery production.</p>	
9	Big Cai Little River System	Kien Giang	10 years	<p>- Control salinity, keep sweet to provide fresh water for the national management area, expand to U Minh Thuong and U Minh Ha areas for the development of production according to the ecosystem using freshwater resources, forest fire prevention. Enhance drainage capacity to reduce waterlogging, polluted water consumption, alum acidity, salinity ... to ensure improved soil and water environmental conditions. Prevent high tides, and sea level rise in the prevention of natural disasters, ensure the safety of production and property of people in the project area. Combining the tasks of developing ministerial and water transport in the project area.</p> <p>- Main contents: Cai Big and Cai Be sewer works with expected apertures of 500m and 200 m located in the estuary area. The channel system transfers fresh water from the Hau River into the Ca Mau Peninsula. The distance between the water transfer shaft channels with a density of 3-5km/channel, the size of the machine is about 10-30m, the bottom height is from -3 to -5m. The system of sea dikes and works under coastal dikes belongs to the sweetening project area to expand the Ca Mau Peninsula. The system of irrigation works at all levels and inland serves the development of agricultural and fishery production.</p>	1.700
Xii	RURAL INFRASTRUCTURE				5.000
1	Improving livelihoods for Vietnam's coastal fishing communities	Coastal provinces	6 years	Improve the lives of people in coastal provinces.	1.200
2	Rural development of rural wildlife in mekong delta provinces in the context of climate change.	Mekong Delta	6 years	Construction and renovation and upgrading of rural infrastructure works.	1.000
3	Develop agricultural research in response to climate change.	20 research institutes	6 years	Invest in upgrading human and material resources for CSNCs and training.	800
4	Rural infrastructure development in the Central Highlands and Binh Phuoc provinces	Central Highlands and Binh Phuoc Provinces	6 years	Construction and renovation and upgrading of rural infrastructure works.	1.000
5	Rural development of rural infrastructure in disadvantaged communes in The South and Thanh Hoa provinces	DBSH and Thanh Hoa province	6 years	Construction and renovation and upgrading of rural infrastructure works.	1.000
Total budget: (Seventy-two trillion)					72.000