

ORDER SHEET
IN THE LAHORE HIGH COURT LAHORE
JUDICIAL DEPARTMENT

Case No. W.P. No.227807/2018

Haroon Farooq Versus Government of Punjab & others

S.No.of order/ Proceeding	Date of order/ Proceeding	Order with signature of judge, and that of parties or counsel, where necessary.
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30.08.2021 M/s. Abu Zar Salman Khan Niazi, Faiz Ullah Khan Niazi, Zain Sheikh, Syed Ghazanfar Shah, Shahzad Ahmad Cheema, Amina Ali, Advocate for the petitioner.
Syed Kamal Ali Haider, Advocate for Judicial Water Commission.
M/s Ahmad Rafay Alam, M. Azhar Siddique, Naila Iqbal, Sheraz Zaka and M. Yasin Hatif, Advocates for petitioners in connected petitions.
M/s Alta fur Rehman Khan, Ishfaq Amir Hussain, M. Jawwad Khan Lodhi and Syed Samir Sohail, Advocates for DHA, Multan.
Barrister Osama Zafar, Advocate for applicant in C.M.No.04/2021.
Mr. Amer Riaz Amir Minhas Advocate for the respondent in C.M.No.04/2021.
M/s. Mansoor Usman Awan and Barrister Hamza Shehram Sarwar, Advocates in C.M.No.06/2021.
Mian Irfan Akram, Advocate in C.M.No.08/2021.
Mr. Qadeer Kalyar, Advocate for the applicant in C.M. No.8/2020.
Ms. Scheherzade Sherhyar, Advocate in C.M. No.10/2020
Mr. Farooq Amjad Mir, Advocate in C.M.No.32/2020.
M/s. Ashtar Ausaf Ali, Nimra Arshad and Faiz-e-Azhar, Advocates for the applicants in C.Ms. No.34 and 36 of 2020.
M/s. Sahibzada Muzaffar Ali and Hannan Masood, Advocates for the LDA.
M/s. Nadeem Ahmad Sheikh, Jahanzeb Sukhera and Osama Qamar, Advocates for RUDA.
Mr. Ashtar Ausaf, Advocate in C.M.No.34/2020.
Sardar Balakh Sher Khosa, Advocate for Cantonment Board.

Mr. Arslan Riaz, Advocate for the respondent-PEPSI.
M/s. Mirza Nasar Ahmad Addl. Attorney General, Tahir Mehmood Khokhar, D.A.G and Rao Javed Khurshid, Assistant Attorney General.
Mr. Anis Ali Hashmi, Addl.A.G.

Muhammad Nawaz Manik, Director Law EPA and M. Fahad, AD(Legal) Law Officer, Environmental Protection Agency, Miss Nabila Khalid, A.D (Legal), EPA.

This litigation was brought as a social action petition (and connected petitions W.P No.2132 of 2020, W.P No.67602 of 2019 and W.P No.71047 of 2019) with climate change as the centerpiece. It is asserted that the Federal Government and the Province of Punjab have taken insufficient steps for countering the climate crises and the petitioner is actuated by failure of these governments to develop disaster management plans. The primary theme of these petitions is that directions be issued by this Court to compel the State to invest in climate mitigation strategies. It was obvious that the subject matter of these petitions broached issues which gave rise to real and immediate concern for an environmental and social framework to be put in place to reduce greenhouse gas emissions and building resilience, all while developing economic, environmental, health and social co-benefits.

2. An exhaustive scientific assessment in 2018 warned that a failure to keep the average temperature from rising more than 1.5 degree celcius compared with the start of the industrial age, could have catastrophic results, including inundation of coastal

cities and crop failures in various parts of the world. A landmark assessment by the Intergovernmental Panel on Climate Change was published on 9th August, 2021 (IPCC, 2021). The sobering report approved by 195 nations shines a harsh spotlight on governments dithering in the face of mounting evidence that climate change is an existential threat. It concluded that “all but a tiny fraction of warming so far is unequivocally caused by human activities” and that “even if the 1.5C target humanity is now poised to overshoot is miraculously achieved, it would still generate heatwaves, rainfall, drought and other extreme weather unprecedented in the observational record”. The crux of IPCC, 2021 is that Earth’s average temperature could reach 1.5 degree celcius above pre-industrial levels around 2030, a decade earlier than projected only three years ago. In an opinion published in the New York Times of July 24-25, 2021 by respected environmentalist Susan Joy Hassol, Kristie Ebi and Yaryna Serkez, the situation precipitated by global warming has been summed up:

“Summers that seemed exceedingly hot 50 years ago are becoming much more commonplace. The extreme heat of that era — which had a chance of occurring of only one-tenth of 1 percent during the summer season — is now reached more than 20 percent of the time, according to calculations by the climate scientist James Hansen. That’s 200 times as often. And nights are warming faster than days, at nearly twice the rate. So much for relief.”

“Heat is one of the deadliest kinds of extreme weather in the United States. From 1991 through 2018, 37 percent of heat-related summer deaths were attributable to human-caused climate change, according to a study published in the journal Nature Climate Change in May.”

These events are emblematic of a larger trend in extreme heat, driven by global warming. And it’s not just a climate problem; as those mortality figures show, it can be a public health catastrophe. In addition to heat stress, extreme heat can worsen chronic conditions such as cardiovascular, respiratory and cerebrovascular disease, and diabetes-related conditions.

The study in Nature Climate Change found that human-induced climate change increased the annual average temperature globally in the warm season by nearly three degrees, to 73.4 degrees Fahrenheit, across 732 locations around the world.

The intense heat that hit the Pacific Northwest in late June and early July would have been virtually impossible in the absence of human-caused climate change, according to an analysis by an international group of scientists working with the group World Weather Attribution. Scientists say they had never seen such a jump in record temperatures like this — breaking records by up to 11 degrees — prompting a co-leader at World Weather Attribution to suggest to the magazine Scientific American that the region may have crossed a threshold in which these kinds of events become much more common. Climate change doesn’t always proceed in a linear fashion and often exceeds the predictions of computer models.”

3. Our Constitution is a social compact between the State and the people. It contains rights which the State is under obligation to enforce and a failure to do so spawns rights-based environmental litigation. We may refer to various provisions in the Constitution which give rise to such rights to inhere in the people of Pakistan and for which the State is obligated to take real and immediate measures so that climate crisis can be averted in all its manifestations.

Article 3 of the Constitution requires the State to ensure elimination of all forms of exploitation and the gradual fulfilment of the fundamental principle, that is, from each according to his ability to each according to his work. This concept of elimination of exploitation can only be fulfilled if the State takes meaningful measures for the control of environmental degradation and for climate justice to be enforced so that the basic principle enshrined in Article 3 can be achieved. Article 9 of the Constitution provides that:

“9. Security of person:- No person shall be deprived of life or liberty save in accordance with law.”

4. There is a plethora of precedents which have given an expansive view to the term ‘life’ as used in Article 9 which clearly includes life which is free from hazards caused by environmental pollution in order to nurture healthy and robust life for the people of Pakistan. Article 38 which is one of the principles of policy, *inter alia*, obliges the State to secure the well-being of the people to provide basic necessities of life such as food, clothing, housing, education and medical relief, irrespective of sex, caste, creed or race. Again this can only be achieved by the State by ensuring the minimum standards comprised in the term ‘life’ and to prevent the climate crisis so that human activity can be carried on without the harmful

effects of severe weather events which are caused by climate change. The concept of penumbras has been employed to enlarge the meaning of life and doubtless, if climate crisis triggers life-changing events, then the right conferred by Article 9 is in serious jeopardy.

5. Water supplies and its preservation has received special attention of the framers of the Constitution by the enactment of Article 155 which reads as under:

“155. Complaints as to interference with water supplies: (1) If the interests of a Province, the Federal Capital or the Federally Administered Tribal Areas, or any of the inhabitants thereof, in water from any natural source of supply [or reservoir] have been or are likely to be affected prejudicially by —

(a) any executive act or legislation taken or passed or proposed to be taken or passed, or (b) the failure of any authority to exercise any of its powers with respect to the use and distribution or control of water from that source, the Federal Government or the Provincial Government concerned may make a complaint in writing to the Council.

(2) Upon receiving such complaint, the Council shall, after having considered the matter, either give its decision or request the President to appoint a commission consisting of such persons having special knowledge and experience in irrigation, engineering, administration, finance or law as he may think fit, hereinafter referred to as the Commission.

(3) Until Majlis-e-Shoora (Parliament)] makes provision by law in this behalf, the provisions of the Pakistan Commissions of Inquiry Act, 1956, as in force immediately before the commencing day shall apply to the Council or the Commission as if the Council or the Commission were a Commission appointed under that Act to which all the provisions of section 5 thereof applied and upon which the power contemplated by section 10A thereof had been conferred.

(4) After considering the report and supplementary report, if any, of the Commission, the Council shall

record its decision on all matters referred to the Commission.

(5) Notwithstanding any law to the contrary, but subject to the provisions of clause (5) of Article 154, it shall be the duty of the Federal Government and the Provincial Government concerned in the matter in issue to give effect to the decision of the Council faithfully according to its terms and tenor.

(6) No proceeding shall lie before any court at the instance of any party to a matter which is or has been in issue before the Council, or of any person whatsoever, in respect of a matter which is actually or has been or might or ought to have been a proper subject of complaint to the Council under this Article.

6. This litigation is primarily concerned with the preservation of water resources and the groundwater levels which have seen a stunning depletion over the years. The Constitution mandates that the interest of a Province or any of the inhabitants should not be affected prejudicially by the failure of any authority to exercise any of its powers with respect to the use and the distribution or control of water from any natural source of supply. This has been made one of the subject matters to be taken cognizance of by the Council of common interests upon a complaint in this regard. Alternatively, this can also give rise to litigation of the present nature to be brought before the courts for the redressal of those grievances and for climate justice to be enforced by the courts. This may be the result of citizens being frustrated by government inaction and threatened by climate change impacts on their lives and human rights and

the courts have, in turn, issued groundbreaking climate decisions.

7. It was said by A. Guterres (Secretary General of United Nations) that:

“Climate change is , quite simply, an existential threat for most life on the planet –including, and especially, the life of humankind. And human are causing it.”

(Key note address. Speech given at the R20 Austria world summit Vienna. May 15, 2018)

8. In a report compiled by Intergovernmental Panel on Climate Change (IPCC) 2018 human activity has already caused a 1°C warming above the pre-industrial mean temperature. This 1°C shift has triggered increasingly frequent and intense extreme weather events, rising sea-levels, and diminishing Arctic sea ice. Across Asia and the Pacific, populations endure severe weather, heat stress, flooding, droughts and sea level rise. According to the World Health Organization (WHO) it is estimated that climate change causes 150000 deaths annually, including deaths from extreme weather (The Health And Environment Linkages Initiative. Climate Change). The WHO further notes that air pollution –significantly contributed to by fossil fuels – kills around 7 million annually in 2020 and according to the report compiled in the year 2018, the WHO concluded that 9 out of 10 people worldwide breathe polluted air. In its previous report compiled by IPCC in 2014, (Climate Change 2014: Synthesis Report Contribution of Working Groups I, II, III to the Fifth

Assessment Report of the IPCC. Geneva) it was stated that:

“Human influence on the climate system is clear and recent anthropogenic emissions of greenhouse gases are the highest in history and that the level of warming was unprecedented over decades to millennia.”

9. In December 2020, Asian Development Bank (ADB) published a Report Series (The ADB report) consisting of four reports entitled “Climate Change, Coming Soon to a Court Near You”, which is a flagship publication series of the law and policy reform program under the office of the General Counsel of ADB. It describes climate change as a clarion call for judges and alludes to the role of judges to the contribution of better climate outcomes in the following words:

“Judges’ role in government makes them gatekeepers, even climate emergency managers. Judges are central to

- *holding governments accountable for meeting policy commitments and complying with legal obligations on climate change, the environment, and sustainable development, and thereby shaping legal and policy frameworks;*
- *admitting relevant and credible scientific evidence for climate change in courtrooms and making judicial findings of fact about climate change, which can elevate the national discourse on climate change (indeed, courts have successfully incorporated international scientific consensus, synthesized by the Intergovernmental Panel on Climate Change, into domestic legal common ground, ensuring that advancements in climate science filter into local law); and*
- *balancing outcomes and protecting citizens’ fundamental, constitutional and other legal rights, frequently closing the gaps through which people and ecosystems fall.*

These functions demonstrate that judges have a vital role in climate governance in Asia and the Pacific. Supporting judges to respond to climate litigation contributes to better quality climate governance.”

“...Significant judicial advancements have often rested on the shoulders of jurists who were willing to apply new consciousness and imagination to existing principles to resolve society’s pressing problems. We need new perspectives to create climate justice. Justice will only be fair if it considers diverse perspectives and rights—those of women, children, elders, indigenous peoples, the differently abled, and future generations, as well as those of the traditional power structures.”

10. The report gives a compilation of climate litigation in Asia and the Pacific and the rest of the world and notes that judges have a vital role in climate governance as well as the fact that climate litigation is growing in Asia and the Pacific and around the world. And so judges and quasi judicial decision-makers must have access to climate law resources. The ADB report is a leading resource of knowledge on climate litigation in Asia as well as the National and International climate change legal frameworks. The purpose of ADB’s report on climate law and litigation has been stated as:

“Frustrated by government inaction on climate change, citizens around the world are turning to their courts, commissions, and tribunals, unleashing lawsuits across the globe. The number of cases is growing and will likely grow exponentially as climate impacts intensify. Typically, national climate impacts and circumstances shape domestic litigation. These cases look for action, climate justice and sustainable development; and protection of rights, review of decisions, and compensation. Climate change is coming soon to a courtroom near you. Judges and members of specialized tribunals will need resources to respond to climate litigation. In

this series of reports, ADB has two overarching objectives:

- I. Supporting judiciaries and legal professionals by sharing knowledge and ideas. Although this report uses the term “judges,” many other legal professionals are sitting in tribunals and commissions throughout Asia and the Pacific who need information about climate change. While these tribunals and commissions may be limited to exercising quasi-judicial powers, they are important components of their national legal system. These tribunals and commissions apply similar standards of rigor to evidence and procedure as courts, and their findings have valuable impacts on climate change regulation.*
- II. Showcasing climate and environmental jurisprudence from Asia and the Pacific. We believe this sharing of information and enrich the global discourse on climate litigation and regulation.”*

11. Apart from sharing knowledge and ideas, the ADB report showcases climate and environmental jurisprudence from Asia and the Pacific and summarizes the effect of climate litigation and its basis in the following words:

“Climate litigation in Asia is also more likely to occur as public interest litigation, founded on a constitutional or statutory right. South Asia boasts excellent examples of environmental constitutionalism—rights-based environmental litigation. In such cases, courts take a more liberal approach to standing because petitioners can hinge their petitions on constitutional rights to life or the environment. It helps that many jurisdictions across Asia and the Pacific have modern constitutions that embed rights. (Report Three surveys positional rights across the region.)

In our view, judicial approaches and principles applied in environmental constitutionalism can also be applied in the climate change context because climate change threatens natural rights, including the right to life. As natural rights exist regardless of constitutional and legal gaps, judicial reliance on them could prove fruitful, and Asian jurisprudence has much to say on this topic. For example, in 1993, the Philippine Supreme Court declared that the right to a balanced and healthful ecology “concerns nothing less than self-preservation and self-perpetuation.” Such rights, therefore, “need not even be written in the Constitution for they are assumed to exist from the inception of humankind”.

12. A reference to the report has been made in order to establish that climate litigation is on the rise in Asia and the courts are leading the way in the area of rights-based environmental litigation. Since in most of these countries including Pakistan the source of these rights is derived from the Constitution, the ADB report describes this area of climate litigation as environmental constitutionalism. In conclusion, Report One refers to the blunt plea of Greta Thunberg, a youth climate activist—at the World Economic Forum in 2019, who said that:

“Adults keep saying we owe it to the young people to give them hope. But I don’t want your hope. I don’t want you to be hopeful. I want you to panic. I want you to feel the fear I feel every day. And then I want you to act. I want you to act as if you would in a crisis. I want you to act as if the house was on fire—because it is.”

And alludes to the important role of Courts as guardians of justice (and by extension) climate justice:

“...Courts are the guardians of justice, rights, and equity. Courts are responsible for referring government decisions and protecting fundamental rights. Around the world, courts are heeding this call. Courts are shaping climate justice by upholding the rule of law, and they are weaving this concept into their national lexicon. In ordering their governments to do their part in responding to climate change, courts are defining what it means to do one’s part.

Courts, commissions, and tribunals have an important role to play in making findings of fact about climate science. The rigor applied in these forums, particularly in relation to facts, veracity, and integrity, is persuasive in the halls of government and the world at large. Judges, commissions, and Tribunal members are expected to make findings of fact and law in an impartial setting. Their findings of fact on climate change hold weight because courts and other semi-judicial bodies are trusted public institutions...”

Courts may do just that—ethically and equitably balance economic development with social well-being and environmental protection. Science must underpin these considerations. For justice to be impartial in climate cases, we must clearly see and hear the science.”

It relies upon the wise utterance of Elijah E. Commings (American politician and civil rights advocate

in comments made during a congressional house committee hearing) to bring home the concept of inter-generational equity, who once said:

“Our children are the living messages we send to a future we will never see. The question is, what will they leave us and how will we send them into that future? Will we send them strong? Will we send them hopeful? Will we rob them of their destiny? Will we rob them of their dreams? No, we will not do that.”

13. The present litigation is an aspect of climate litigation in Asia. More appropriately this litigation seeks climate change adaptation. It hinges on fundamental, human and constitutional rights. The ADB report makes an attempt at defining climate litigation broadly by expanding on the previously authoritative works that have limited the scope of climate litigation to those “cases brought before administrative, judicial and other investigatory bodies that raise issues of law on fact regarding the science of climate change and climate change litigation and adaptation efforts”. (United Nations Environmental Programme. 2017. The Status of Climate Change Litigation, A Global Review. Nairobi. p.10), to encompass the following:

“Climate change litigation is defined broadly in this report as any case that is brought before judicial courts and administrative or specialized tribunals that (i) raises climate change as a central issue; (ii) raises climate change as a peripheral issue; or (iii) does not explicitly raise climate change but has ramification for climate change mitigation or adaptation efforts, e.g., recognition of intergenerational responsibility. The figure shows the three elements of the definition.”

14. In the recent past, Pakistan has put in place legal frameworks for tackling rapidly depleting water resources as part of broader policies on climate change. The watershed moment was the adoption of National Water

Policy, 2018 (The Policy) by the Government of Pakistan. It was described as ‘The Declaration of A Water Emergency’ and proclaimed as ‘our promise to the coming generations’. The preamble captured the grim situation by stating that:

“The irrigation network of Pakistan is one of the largest contiguous irrigated systems in the World. The snow-clad peaks of the mountain ranges in the North continuously re-charge the system. The descending snow-melt and monsoon waters flow into the country’s Indus River System and its tributaries. Passing through the plateau and the great plains across the Indus Valley, the rivers join up to form the Indus that eventually drains into the Arabian Sea in the South. Irrigated agriculture is the backbone of the country’s economy, and consumes around 95 percent of the nation’s water resources, the balance is used for domestic and industrial requirements.

With rapidly growing population, Pakistan is heading towards a situation of water shortage and by corollary, a threat of food insecurity. Per capita surface water availability has declined from 5,260 cubic meters per year in 1951 to around 1,000 cubic meters in 2016. This quantity is likely to further drop to about 860 cubic meters by 2025 marking our transition from a “water stressed” to a “water scarce” country (The minimum water requirement to avoid food and health implications of water scarcity’s 1,000 cubic meters per capita per year). The situation calls for rapid development and management of the country’s water resources on a war footing.

Water resources are inextricably linked with climate and the impending climate change scenario has serious implications for Pakistan’s water resources. The changing and unpredictable precipitation patterns may have serious consequences, including flash floods in the north and increasingly prolonged droughts in the south. As the glaciers retreat, more glacial lakes will form, increasing the risk of Glacial Lake Outburst Floods (GLOF), which are already becoming increasingly common and hazardous in the Northern parts of the country. Only by devising and implementing appropriate adaptation measures will it be possible to ensure water, food and energy security for the country as well as minimize the impact of natural disasters.”

“But now a water crisis is descending like a thunderbolt. While the continuing increase in population at an annual rate of over 2% combined with rapid and un-regulated urbanization has already pushed Pakistan into the category of water stressed countries, the phenomenon of climate change is causing faster melting of the high altitude glaciers, on which the Indus Basin system is dependent and is also raising sea levels. Pakistan is located in one of the three most vulnerable regions in the world in terms of climate change threats of increasing frequency and intensity of floods, prolonged droughts and the frightening possibility of the melting of the Himalayan Ice cap.”

The main concerns were also listed in the Policy as:

Main Concerns

Some of the specific issues concerning the water sector are:

- i. Fresh water being a finite resource is progressively becoming more scarce due to persistent increases in its competing demands;*
- ii. Water scarcity can adversely affect the health and well-being of the people of Pakistan and must be resolutely addressed especially since it has serious implications for the nation’s food and energy security;*
- iii. The geographic location of Pakistan places the country in the heat surplus zone on Earth, putting it high on the vulnerability scale of climate change with considerable increase in frequency and intensity of extreme weather events and erratic monsoon rains (as demonstrated by the unprecedented floods of 2010)*
- iv. Existing and planned trans-boundary developments on the Western Rivers could further impact water availability to the disadvantage of Pakistan;*
- v. The “Indus Basin Replacement works” (dams in particular) are approaching the end of their designed life span due to situation. requiring replacement storages;*
- vi. Different regions in the country are endowed differently with water in terms of precipitation, surface flow and ground water and there is increased stress on the sharing of water resources;*
- vii. Lack of equity in water allowances of various canal commands is causing water and salt imbalances at a regional level;*
- viii. Salt balances in irrigated lands are already negative and with the passage of time the soil quality will deteriorate resulting in reduced yields.*
- ix. Bulk of drinking water requirement is met by groundwater which is depleting and its quality is deteriorating;*

- x. *It is necessary to avoid growing conflicts and social unrest in the country due to water scarcity;*
- xi. *The mandate and roles of the federal and provincial water related agencies need to be reviewed in view of the 18th Amendment to the Constitution;*
- xii. *Concentrated efforts are needed to re-use treated sewage water in order to reduce sweet water demand;*
- xiii. *There is lack of awareness amongst the general public about the impending threat of water scarcity and the huge wastage of sweet water; excessive watering of crops is endemic with total disregard for efficiency and conservation;*
- xiv. *Desalinization of Sea water is a significant source of water, however, no effort has been made for desalinization in the light of technology advances and international best practices;*
- xv. *Irrigated agriculture is indispensable for Pakistan's agriculture and low irrigation efficiency vis-à-vis water productivity is a major factor leading to lower growth of the sector;*

It has become a national imperative to ensure water security for the people of Pakistan, through a National Water Policy (NWP) laying down the outlines of an integrated water management strategy that can optimize the economic, social and environmental returns on water resources, ensure equitable allocation among its competing demands as well as its judicious use by consumers and safe disposal of post-use effluents.

One of the Policy Objectives related to:

“2.4 Improving urban water management by increasing system efficiency and reducing non revenue water through adequate investments to address drinking water demand, sewage disposal, hurdling of wastewater and industrial effluents.”

2.2 Augmentation of the available water resources of the country through judicious and equitable utilization via reservoirs, conservation and environmental needs.”

15. This litigation is not all-encompassing regarding entire aspects of water crisis but is limited in extent and focuses on the above two objectives. The Policy

recognizes water conservation to be accorded the highest national priority. This Court was compelled to take up the mantle of water conservation because there seemed a woeful lack of follow-up measures following the adoption of Policy. For instance, with regard to ‘Drinking Water and Sanitation’ and ‘Urban Water Management’, the Policy observes that:

12. DRINKING WATER AND SANITATION

12.1 Plans and initiatives shall be undertaken to progressively provide access to clean and safe drinking water and sanitation facilities to the urban and rural population of the country.

12.2 Full financial sustainability shall be aimed at for the Urban Water Supply and Sanitation Systems through effective reduction in wastage, theft and non-revenue water allocation and 100% metering, with effective safety-nets for the urban and peri-urban poor. Similarly, urban water tariffs must be revised to ensure financial sustainability.

12.3 The Rural Water Supply and Sanitation Services shall be priced at affordable rates.

12.4 Under no circumstances, shall the quality of drinking water, urban or rural, be allowed to fall below the specified standards. Each agency responsible for delivery of such services shall prepare Quality Monitoring Plans and shall be responsible for their rigorous enforcement.

12.5 The sources of water, surface as well as underground, shall be diligently protected from contamination and always maintained in a healthy state, through enforcement of legislation for controlling water pollution in coordination with provinces.

12.6 In remote area of the country, solar desalination of water will be promoted to provide the communities safe drinking water.

12.7 The groundwater levels have dropped to alarming depths and are falling further – potentially reaching the highly saline ancient sea water level in the coming few years. Alternative sources of surface water need to be urgently developed and adequate ground water re-charge ensured

12.8 Drinking water and sanitation plans will be adopted in line with the National Drinking Water and Sanitation Policies and Sustainable Development Goals.

13. URBAN WATER MANAGEMENT

13.1 Urban water management will elementally be integrated into overall water management of the country.

13.2 System losses in urban areas are a major issue which can be attributed to lower rates of recovery. Recovery will be enhanced and system losses will be reduced to the bare minimum.

13.3 Non revenue water in urban hubs need requires a coordinated effort. Public Health Engineering Department and WASAs will be encouraged to devise coordinated strategies under Provincial Action Plans

13.4 Industrial units and municipal entities will be required to treat effluents and hazardous discharge before disposal

13.5 At present, less than 1% of total wastewater in the country is treated before disposal. Treatment will be promoted at centralized level (in technical terms) at first and will be decentralized in due course of time

13.6 Drinking water supply will be aimed at provision of safe, affordable and sustainable supply of water to every citizen of Pakistan.

16. None of the above goals have been met nor tangible steps taken for their realization. No plans and initiatives have been formulated to give effect to the core objectives laid out in the Policy itself. The directions issued by this Court are related to the very basic and rudimentary knowledge of the area of water management and aim at effective reduction in wastage, non-revenue water

allocation and metering. It was felt that the sources of water, surface as well as underground, should be diligently protected from contamination and always maintained in a healthy state. In a shocking revelation, the Federal Government disclosed in the National Assembly that an overwhelming majority of the cities in Pakistan do not have safe drinking water for citizens (Based on tests conducted by Pakistan Council of Research of Water Resources (PCRWR). The underground water was found contaminated with arsenic, iron, fluoride and bacteria. Similarly, according to the Director General of the Water Management Department, Govt. of the Punjab, Pakistan's available underground water reserves will last 25 years. Due to shortage of canal water, Punjab is also using groundwater for irrigation through tube-wells. The petitioners contended that groundwater levels have dropped to alarming depths and are falling further—potentially reaching the highly saline ancient sea water level in the coming few years. Since the Policy has largely remained a painting — to be looked at, this Court grasped the opportunity with both hands to shake the governments out of their slumber and to nudge them to put the Policy into action.

17. On 20 December, 2019 the Supreme Court of Netherlands handed down "*State of the Netherlands (Ministry of Economic Affairs and Climate) v Urgenda Foundation (Case No.00135, unreported)*". It observed that Dutch State had done too little to prevent dangerous climate change and that art. 2 (right to life) and art.8

(right to respect for one's private and family life) of ECHR entailed a positive duty to take measures against climate change. The Dutch Government has been ordered to cut greenhouse gas emissions by at least 25 per cent of the 1990 levels by the end of 2020. The decision in *Urgenda* sets out that even when it is not known when a potential hazard will materialize, states are still required to comply with their positive obligations under art.2 and 8 in line with the “**precautionary principle**”. (For fuller analysis, see 2020 PLC 20).

The European Court of Human Rights noted in *Jugheli v Georgia* (38342/05, unreported, 13 July 2017) that, “it was within the Court’s jurisdiction to assess whether the Government approached the problem with due diligence and gave consideration to all the competing interests.”

18. In order to address the adverse impacts associated with global warming, a key goal of climate justice is to put across the effects of mitigation and adaptation in order to promote greater climate equity. A large number of judicial directions in this case relate to mitigation and adaptation measures particularly those aimed at water conservation. Climate change engenders adaptation needs which, in turn, feeds adaptation policies and options which can reduce risks to natural ecosystems by its restoration, to health, livelihoods, food and water with efficient irrigation, green infrastructure, sustainable land use and water management. Thus the twin themes of

mitigation and adaptation have to be at the heart of any climate litigation.

19. As the proceedings wore on, the attention of this Court was engaged in a myriad of ways. The realization set in that in order to illuminate the meaning and effect of water justice, the litigation in hand had to transition to supervisory jurisdiction or what is sometimes referred to in some of the jurisdictions as a continuing mandamus. Called by whatever name, these are novel constitutional remedies when judiciaries deem certain legislative action incompatible with their enshrined fundamental rights. Judicial directives had to be issued on which the executive was required to report back to Court. In order to achieve this and to represent this Court on the ground, a Water Commission was set up on 15.02.2019. The singular objective was the attainment of water justice in motion. Since its establishment, the Water Commission (later redesignated as Water and Environment Commission) has compiled over a hundred reports which form part of the record. The function of the Commission has been unique and takes a paradigm shift from the previously appointed Commissions. It was not set up to compile a report on an environmental issue but in a break from the past, its remit was to undertake actual work and to supervise practical measures so that water justice for the citizens was brought into realization and not left to gather dust in the form of reports and policies. Primarily, the Commission carried into effect the directions of this Court apart from suggesting ways to preserve

groundwater level. As explicated, the Commission was also tasked with the issues relating to environmental pollution at a later stage. Recently, in a first, Athens (Greek) appointed a “Chief heat Officer” tasked with giving one of the world’s most ancient cities an inhabitable future. Other countries are following suit. Thus there is a growing realization to appoint public officers to deal with climate hazards in order to reverse the tide and to create livable environment.

20. The following narration (in the form of orders of this Court) would showcase the strides which have been made for water conservation and environmental pollution at least within the area comprised in the city of Lahore. The summation has been divided into topics covered during the journey of these petitions. A short prefatory is followed by reproduction of orders passed to ensure that directions of this Court have been implemented.

I. Waste water Sewerage / Treatment Plant:

The Commission ensured the installation of 73 large and medium scale treatment plants at Sundar and Quaid-e-Azam Industrial estate. Furthermore, the Commission ensured stoppage of 400 industrial units which were injecting waste water and sewage waste directly into the aquifer through soaking pits causing severe contamination of groundwater. Recently action has been taken against 46 Sugar industries which have being directed by the Commission to install waste water treatment plants and the process of installation is ongoing.

1. Order dated 05.09.2019:

“A report has been filed by the Chairman Water Commission Lahore which delineates the various steps taken by the Water Commission pursuant to the

directions issued by this Court. A summary of the steps which have been taken is as follows:

1. That the quality of ground water is constantly being contaminated by Soaking Pits which is an unregulated undefined method of disposal and has not been covered under the Punjab Environmental Protection Act, 1997. Soaking Pit is a recognized method of contamination internationally.

2. That the EPA provided a list of 223 industries located at Multan Road Lahore Injecting Waster Water into Sub Soil water /discharge of Liquid effluent without treatment the list has been annexed along will the main report.

3. The factories /industrial units/housing society's generally non-compliant with the PEQS Punjab Environmental Quality Standards for Municipal and Liquid industrial effluents as per Notification (120 of 2016) which clearly defines the parameters that require a particular chemical ingredient or containment to be treated.

4. By virtue of the 41 reports and surveys conducted by the focal person appointed on behalf of the Water Commission the Water Commission issued notices to the same and out of 41 industrial units 18 have tendered their affidavit to the following effect:

a. That they will Immediately stop infection of Waste Water /Sewage Waste into Soakage pits.

b. That in case of Waste Water discharge, immediate installation Waste water treatment plants.

c. That in case of Sewage Waste discharge, immediate installation waste water treatment plant and septic tanks.

5. That the Water Commission under the auspices of this honorable court had issued directions to the aforementioned industrial units by virtue of the order dated 29.9.2018 passed in W.P No.231266/2018 by the Lahore high Court Lahore for Installation of Waste Water Treatment Plants.

2. The steps taken by the Water Commission and the supporting staff arc commendatory and would go a long way in ensuring that the future generations of Lahore avail the benefits of clean groundwater and sustainability so that the levels of groundwater can be properly maintained. The learned counsel for Water Commission has taken this Court to the report of Sustainable Development published in the Journal of Pollution Effects and Control which refers to the current situation of Aqueous Arsenic contamination in Pakistan focused on the Provinces of Sindh and Punjab. It also dilates upon the impact of Soaking pits on groundwater

table. The following observations are pertinent and are reproduced for reference:

"Punjab province. both the water sources from depths of less than 100 feet and above 100 feet have arsenic contamination problems. In addition, data analysis gathered by UNICEF for 6 wells 3 shallow and 3 deep in Muzaffargarh Punjab province located at lateral distance of 65 feet to 165 feet apart from each other revealed that arsenic in shallow well 20 to 35 feet deep ranged from 2.2 ug/L in deep wells 100 to 350 feet deep. it was from 61 to 170 ug/L the results suggesting that the increase of arsenic with depth in this specific locality. "

3. The report of Water Commission makes extensive reference to the industrial units which are injecting waste water / sewage through soaking pits into subsoil /discharge of liquid effluents without treatment causing serious contamination to aquifer /groundwater in the district of Lahore. Substantial steps have been taken by Water Commission with the aid of the focal person and a representative of the Environmental Protection Department, Govt. of the Punjab. It has been brought forth in the report that undertaking has been submitted by various industrial units to follow up on the steps which would ensure the treatment plants to be installed in those units so that industrial waste does not contaminate the groundwater through soaking pits. Forty-three industrial units have been identified till now of which eighteen have been scaled. Most of them have furnished an undertaking to comply with the basic requirements of disposal of industrial waste. The Water Commission shall ensure that these units follow up on their undertaking. In case they do not do so, a further report shall be filed on the next date of hearing so that proper action is taken against these industrialists. The D.G Environmental Department is also present in Court and assures that full assistance shall be provided to the Commission in identifying industrial units which are in violation of the environmental standards with regard to the disposal of industrial waste.

4. It is made clear that any action being taken by the Water Commission is on the directions issued by this Court and shall be deemed to be in pursuance to such directions. Therefore, it is reiterated that all public officers and functionaries in the Province of Punjab ought to extend full cooperation to the Water Commission in the fulfilment and discharge of its duties".

Order dated 30.01.2020:

“The Water and Environmental Commission has submitted the report No.43 in which various steps taken by the Commission have been mentioned and elaborated upon. **These steps include the sealing of the industrial units which are injecting hazardous pollutants in the ground water. The notice given to the industrial units to compel them to install treatment plants have also been delineated in the report. Pursuant to the notices issued by the Commission an opportunity of hearing was provided to the industries and factories as well as housing societies prior to initiation of sealing operation against the non-compliant industrial units and housing societies. Notices were also issued to the Sunder Industrial Estate and the factories which are operating within that Estate.**”

II. Securing Land for construction of combined affluent treatment plant at Sunder Industrial Estate.

Order dated 14.02.2020:

“A report has been filed on behalf of the Chairman Water Commission. In that report, it has been pointed out that a combined affluent treatment plant is being set up in Sunder Industrial Estate. However, the learned counsel points out that a chunk of land was earmarked for setting up the treatment plant in Sunder Industrial Estate and it is apprehended that that land may be used for some other purpose. It is directed that the land earmarked for setting up the affluent treatment plant shall not be used for any other purpose during the pendency of this petition before this Court.”

III. Action Against Sugar Industry:

Sugar Industry has not cared to install treatment plants for treating the effluents generated during production process. This aspect was brought to fore by Mr. Sheraz Zaka, Advocate in one of these petitions alleging that chemicals such as arsenic etc.

were being injected into the ground which is a major source of contamination of groundwater:

Order dated 03.12.2020:

“Mr. Sheraz Zaka, Advocate has appeared in one of the connected petitions and states that there were a number of sugar industries set up in the area of Sargodha/Bhalwal which were contributing to pollution of the groundwater aquifer by injecting the affluent directly into the ground. The D.G E.P.A shall depute a team of officers to visit these industries and to file a report within fifteen days.”

Order dated 11.12.2020:

“Learned Addl. A.G has placed on record a notification issued by the E.P.A regarding constitution of a team for visiting sugar industries set up in the area of Sargodha, Bhalwal on the allegation that they are involved in pollution of the ground water aquifer by injecting the affluent directly into the ground. The notification shall be suitably amended to include a member of PDMA Punjab to be involved in the entire exercise.”

Order dated 24.02.2021:

“Report also refers to the action taken in respect of 26 sugar industries which have been given a deadline of 2nd March, 2021 for submission of environmental impact assessment along with respective design of the waste water treatment plants. In case compliance is not made of the directions issued by this Court and being implemented by the Water Commission, sealing of the premises of these sugar industries shall be undertaken by the EPD.”

IV. Ablution Water Tank:

190 ablution water tanks have been successfully constructed in different housing societies including LDA, PHA, DHA, Cooperative Housing Societies. Data Darbar ablution water tank the very first of its kind and the largest tank has been completed which has the capacity to store 60,000-70,000 gallons per day. This is a novel scheme to save wastage of fresh water as it was realised that perhaps mosques were the places where greatest use of fresh water was being made during ablution process. This scheme saves enormous amounts of water daily.

Ablution water used for irrigation and Cleaning of Roads by PHA and LWMC.

Walton Cantonment Board/Ablution Water Tanks

Three (3) Major Mosques

Sr. No.	Name of Mosques & Locations	Total Gallon Water Save
1	Jamia Masjid Khalid Cavalry Ground Lahore Cantt	4000 Gallons Per day
2	Jamia Masjid Mazahar-uloom Ra Bazar 4000 Gallons Per day	4000 Gallons Per day
3	Imam Bargha ,Nishat Colony	1000 Gallons Per day
4	PHA /Ablution water tanks in 52 Mosques	52x1000= 52, 000 Gallons per day water saved
5	DHA/Ablution water tanks 11 ablution water tanks saving an average of 1000 gallons per tank per/day.	saving an average of 11,000 gallons per /day water saved.
6	Cooperative Housing Societies/LDA/ has installed 120 Ablution water tanks	120x1000= 120,000 gallons per/ day water saved.

Total water saved through installing Ablution Water Tanks

192,000 gallons per/ day
water saved.

Order dated 20.12.2018:

“M.D WASA submitted, that thousands of gallons of water is used on daily basis in Mosques and shrine for wuzu and by constructing a water storage tank with the Mosques/Shrine, that water can be stored for watering the plants. He further submitted, that WASA has successfully installed and operated a tank outside of a Mosque in Lahore for experiment. Therefore, P.H.A, L.D.A, WASA and Auqaf Department were directed to prepare plan for installation of water tanks alongside of Mosques/shrine for this purpose.”

Order dated 14.07.2020:

“Learned counsel for Water Commission also informs that the project which is underway at Data Darbar for the storage of ablution water is also not being completed owing to lack of funds which are not being released by the relevant department. Learned Addl. A.G shall seek instructions in this regard and inform this Court on the next date of hearing.

Order dated 24.02.2021:

“Further Data Darbar Ablution water tank has almost been completed in which according to the report almost 60,000 gallons of water has been stored. The lorry hydrants have also been installed and the water tank shall be functional in another couple of days. Learned Addl. A.G submits that an application has been made to the Supreme Court of Pakistan for clarification of the order of the Supreme Court of Pakistan regarding purchase of vehicles.”

V. Car wash recycling plant:

Through intervention of this Court the Commission has ensured the installation of 310 Car Wash Recycling Systems. It is pertinent to mention here that the follow up teams have been formulated by the Judicial Water & Environmental Commission from amongst the WASA officials which daily monitor and check the operationality of the car wash recycling plants.

Order dated 29.09.2018:

“It is noted during the arguments and reports submitted by the departments that clean water is being wasted by the petrol pumps/service stations to wash the vehicles. **As per report, approximately 400 liters clean water used to wash a vehicle and further the owners of the petrol pumps/service stations (vehicles washing) are not being paid even a single penny from the day first to the WASA Lahore or the Government of Punjab despite the fact, that the state is the owner of the minerals. In this state of affairs, it is directed that the Chief Secretary Punjab shall issue a direction to all the concerns in the following terms: -**

That all petrol pumps having facility of service station (Car Wash) and the Car Wash stations owners shall make arrangements for recycling of the water being used for service of vehicle. For this purpose a water tank shall be constructed with the consultation of Engineer.”

Order dated 11.12.2018:

“As a first step, WASA and LDA (aided by the Metropolitan Corporation, Lahore) are directed to issue prohibition regarding car washing by use of pipes with an unrestricted supply of water. If at all it is necessary to wash a car, the residents can only do so by storing water in a bucket or other container. Preferably, it should only be done at a validly operated car wash stations.”

VI. Use of surface water:

The Commission under the directions of this Court opened 17 out of 24 irrigation channels of the Lahore Branch Canal which remained choked for 35 years. After restoration of Lahore Branch Canal surface water was substituted with ground water as a result of which GOR-I, FC College, Model Town, Race Course Park, Lawrence Garden, Mental Hospital, Punjab University Quaid-e- Azam Campus, Governor House, Aitchison College, Jallo Park are now being irrigated with surface water rather than ground water.

Order dated 29.09.2018:

“The water courses as pointed out through a report by the Additional Director General, PHA, still exist through which the major parks, Governor House and Aitchison College, G.O.R-I, Lahore can be provided canal water for plantation. Secretary, Irrigation Department shall ensure that the water courses, which are 26 in number, shall be opened within 15 days and a compliance report shall be submitted”.

Order dated 20.12.2018:

“The Additional Secretary, Irrigation Department and Managing Director WASA reported, that 26 water courses started from canal are closed and almost become redundant. The Additional Secretary, Irrigation Department, on the next day after inspecting the site submitted, that he will try to re-open the water courses. The Additional Secretary, Irrigation Department, with the help of P.H.A and WASA, by putting utmost efforts succeeded to open 17 watercourses running from canal and presently the Governor House, Aitchison Dollege, GOR-I, Bagh-e-Jinnah (Lawrence Garden) and Jillani Park (Racecourse Park) are being irrigated from the canal water. It was also reported, that the watercourse up to the Model Town Lahore have also been re-opened and presently, the Model Town Park, which is a big one, is being irrigated by the canal water channel. The

Additional Secretary Irrigation Department also informed, that a major portion of the water channel starting from canal to Lahore Cantt. is available but is not possible to functional as part of the channel. The Lord Mayor, Lahore, Additional Secretary, Irrigation Department, Managing Director, WASA and CEO Lahore Cantonment Board visited the site and finally they succeeded to open the water channel and presently most of the area of Lahore Cantonment board is being irrigated by canal water.

Learned counsel for the petitioner, on the basis of the report submitted by the Additional Secretary, Irrigation Department, submitted, that because of the order passed by this Court and the efforts made by the MD WASA, Lord Mayor Lahore and Additional Secretary Irrigation Department, more than 22 lac gallons drinkable water daily is being saved.

Irrigation Department and Planning & Development Department, Government of the Punjab was directed to expedite the 'Ravi River front Urban Development project for using the canal water for drinking purpose.

VII. Reuse of treated water for irrigation and washing of roads:

This Court ordered US Denim & Coca Cola Pvt Ltd. to install treatment plants which are now treating approximately 72 Lacs liters of waste water and making it reusable to provide the same to PHA for utilization of horticultural activities and to the Lahore Waste Management Company for washing of roads.

VIII. Issuance of challan for wastage of drinkable water:

It was ordered by the Commission that the bucket of water can be used to wash vehicle. The Commission included washing of pavements, roads in category of water abuses. It is pertinent to mention here that till date 7000 challans have been issued against various violation.

IX. Collection of Aquifer charges from private housing societies all across Punjab:

The Judicial Water Commission with this Court's permission for the first-time imposed payment of aquifer charges on private housing societies. As a result 1.3 Billion rupees were collected for the

payment of aquifer charges from various private & public housing societies and the Collection is ongoing contributing to the Provincial Exchequer.

X. Rain Water Harvesting:

The Judicial Water Commission steered two projects in collaboration with WASA one by name of Drainage Sore Point located at Lawrence Road the underwater reservoir which has been constructed over an area diameter of 13 thousand square feet. It shall have the capacity to store 15 Lac gallons of storm water. The funds for the project were withheld by the government departments time and again for which repeated directions were issued on different dates of hearing. Finally the project first of its kind, saw the light of the day and will serve as a remarkable source to replenish groundwater.

Order dated 14.07.2020:

“Report No.62 has been filed which relates to the water tank which is part of the project of rain water harvesting and currently is being constructed at Lawrence Road, Lahore. According to the learned counsel for Judicial Water Commission, the water tank is being completed, however, funds which are necessary for its completion are not being released by Government and this creates an impediment in the way of its entire construction. Learned Addl. A.G shall seek instructions as to why funds are not being released. **It is made clear that the water tank is being constructed with the active intervention of this Court and the efforts being put in by the Water Commission appointed by this Court. In this regard on numerous occasions this Court had to issue directions for the release of funds which were withheld by the Government and due to which the project could not be completed to this day. However, the entire funds required for its completion are still being withheld by the Government. It is also made clear that the Government including its ministers or any of other functionaries should not take undue credit as being reported in the media regarding ownership of this project and its completion which owes entirely to the efforts by the Water Commission appointed by this Court. However, it is expected that the Government shall initiate similar projects which are essential for water conservation and for raising the level of aquifer of Lahore”.**

Order dated 09.10.2020:

“The learned counsel has referred to the report prepared by Pakistan Council of Research in Water Resources regarding groundwater through rain water harvesting. Firstly, according to the learned counsel, the first rain water harvesting will be installed commencing 12th of October, 2020. This report shall be placed before the Vice Chairman, LDA for further action with regard to water conservation as LDA as a regulatory authority is tasked with future projects which have a huge impact on the aquifer of Lahore. The Vice Chairman LDA shall convene a meeting during the next week in which this issue shall be highlighted. Furthermore, LDA shall place on record concrete measures which the LDA seeks to take for the purpose or overseeing future construction but also for enforcing installment of treatment plants in all future constructions to be undertaken within the territory being regulated by LDA.”

Order dated 03.12.2020:

“Also the learned counsel for the Commission submits that further funds are required for completion of Lawrence Road water reservoir project. Learned A.A.G shall seek instructions from the Secretary Finance regarding this project on the next date of hearing.”

XI. Recharge Well:

Under the direction of the Court the PCRWR and PHA initiated the project of installation of recharge wells for the purpose of water recharge which is under process. **On the successful completion of recharge well design the PHA shall install recharge wells in 300 Parks across Lahore.**

XII. Water Meters:

There are more than 700,000 connections in Lahore whereas water meters are not more than 40,000. On the direction of the Court WASA expedited the process of installation of water meters and currently the procurement of water meters is at prequalification stage of the bidding process for the acquisition of 7,110,00 meters.

Order dated 29.07.2019:

“One of the steps is regarding installation of the meters. It has been brought forth in the report that there are no water meter manufacturers in Pakistan and the meters for the purpose will have to be

imported. There is an excessive amount of custom duty which is imposed on the importation of the meters. Learned Assistant Attorney General is present on Court's call and shall seek instructions from the Member Customs as to the possibility of waiver of customs duty after seeking instructions from the Federal Government. This is a matter of national importance and water saving can only be possible if water meters are installed and people are made aware of the use of water in a more prudent manner. Also, a letter has been produced which has been written by the Planning and Development Board and addressed to the Managing Director, WASA regarding certain formalities to be complied with regarding procurement of the meters. The Managing Director, WASA is present in the Court and undertakes that required documents shall be furnished as early as possible. The M.D, WASA is also directed to expedite the process and to file its report before the next date of hearing”.

XIII. Sealing of Tube wells and reduction in water supply timing:

On the direction of the Court, the Judicial Water and Environmental Commission Sealed 7 tubewells of 2-3 cusec at various location of Lahore. It is pertinent to mention here that the Judicial Water Commission directed WASA to reduce the timing of water supply which has resulted substituted water saving.

XIV. Water Conservation incorporated in various LDA building plans:

On the directions of the Court LDA incorporated construction of two water tanks as mandatory requirements for issuance of completion certificate for all commercial buildings.

Order dated 02.10.2020:

“The counsel for LDA referred to the report filed on the last date of hearing. According to the learned counsel, funds have been allocated by the Authority for construction of two water tanks in Lahore at the cost of 115 Million. Also a project for urban station has been launched and the necessary funds have also been allocated. Building & Zoning Regulations, 2019 have been approved which provide for solar panels to be installed by all the commercial buildings. The counsel for LDA shall place on record a report delineating the steps taken by LDA as well as the duly approved Regulations which provide these

measures to be taken. The counsel shall also file a report regarding the steps taken by LDA for the implementation of these Regulations which is the most essential component of the entire project.”

XV. Results achieved regarding Water Table:

Due to various interventions initiated by the Court and its Commission working under the auspices regarding conservation, protection of groundwater which included the aforementioned steps which have been taken over time and continue to be taken, some remarkable results have been achieved of which the one which outstands is concluded by a report compiled by the Directorate of Hydrology, WASA. **As per the Directorate of hydrology WASA water level was lastly 50.150 meters in 2018 and since then till 2020 it is at 50 meters meaning thereby that there has been no further depletion of groundwater. This is indeed a living example of water justice in action and goes to show how judicial directions which are result-oriented, can bring about a difference to our environment.**

Total Water Saved through the interventions of the Court:

WATER SAVED AS A RESULT OF THE FORMULATION OF JWC.		
<i>Sr. No.</i>	<i>Activity</i>	<i>Saving of Ground Water (Million Gallons per Day)</i>
1.	Restoration canal water channels of Lahore branch Canal .	17.50
2.	Recycling and mechanized car washing	0.35
3.	Aquifer charges on water bottling firm (@20% saving by decreasing wastage)	3.00
4.	Aquifer charges on industries and private housing schemes	3.00
<i>Two Crore thirty Eight Lacs and Fifty Thousand Gallons per day</i>		23.85

Surface Water to substitute Ground Water Use in Parks

Irrigation Department

11 parks Race course park ,Baghe Jinnah, Governors House ,Aitcheson College, State Guest House Gorl,Mental Hospital FC college ,Model town Punjab university Quaid Azam Campus, Jallo park	27.125 Cusecs Amounting To One Crore Seventy Five Lakh Gallons of Ground Water Per day has been saved.
In collaboration with the Irrigation department the Walton cantonment board has substituted surface water with ground water.	44,000 gallons of ground water per/day whereas the total requirement of Walton cantonment board is 69,000

XVI: Formation Of Judicial Environmental Commission

Order dated 31.10.2019:

“The issue of smog, was dealt with on the last date of hearing and a meeting chaired by the Chief Secretary, Punjab was also brought to the notice of this Court in which it had been decided that the brick-kilns operating on the old technology shall not be permitted to operate from 1st of November, 2019. However, in recent days the condition of smog has deteriorated to an alarming extent. In one report released by an international agency, Lahore has been declared to be the most polluted city in the world.

The proceedings in this Court today have convinced this Court that it is imperative to put in place certain measures for dealing with the issue of pollution which has assumed alarming proportions in the recent days. It is likely to worsen in the coming days and must be dealt with on emergency basis. For the purpose, the Commission appointed by this Court is also designated as the Environmental Commission.

It is directed that all departments of the Govt. of the Punjab shall render proper assistance to the Commission in the discharge of its functions and all proceedings taken by the Commission shall be deemed to have been authorized by this Court. The Commission shall take all measures which are imperative for putting a stop to further contribution to pollution being cause to the atmosphere of Lahore”.

XVII: Judicial Orders for Curtailing the Effects of SMOG

Conversion of Brick kilns from bull trench to Zigzag technology all across Punjab:

According to data, brick-kilns are one of the biggest causes of smog which comes to engulf vast areas of Punjab during the winter season. Primarily because they operate on out-dated technology which emits blackish plumes of smoke containing hazardous chemicals and which suspend in the air, particularly during cold weather. The extremely debilitating effect on human health is a matter of medical and scientific fact. As a consequence of the Court orders the Brick Kilns have now reached 100% conversion across Punjab which have been converted from old bull Trench technology to zigzag Technology. It is pertinent to mention here that in order to maintain the

percentage of converting brick kilns, the follow-up teams appointed by the Judicial Environment Commission randomly check the brick kilns and if they find them non-compliant seal the brick kilns premises.

Order dated 11.10.2019:

“The report has been filed on behalf of the learned counsel for Water Commission. It is placed on record. Learned A.A.G has also placed on record the minutes of the meeting held under the chairmanship of the Chief Secretary regarding the condition of smog in the Punjab and the measures which have been directed to be taken. The representative of EPD shall also file a report on the next date of hearing as to whether the brick-kilns which are still operating without the new technology have been allowed to operate or not”.

Order dated 30.01.2020:

“It is imperative therefore that the brick kilns be converted to the latest technology and for which a timeline has been provided depending upon the various regions which have been divided into zones. The brick kilns which fall within the red zones have been directed to shift to zigzag technology on 30.06.2020. These measures regarding the conversion of the operation of the brick kilns will be followed up meticulously by the Environmental Department of the Govt. of the Punjab. The Secretary Environment shall take appropriate steps for implementing the decisions made in the meeting of the Cabinet subcommittee on smog. A periodic report shall be submitted on each date of hearing by the Secretary Environment or by the EPA which shall be taken up for perusal by this Court”.

Order dated 14.07.2020:

“According to the report No.61 filed by the Judicial Water Commission, short term plan has been formulated which includes the shutting down of brick kilns which are running on old technology and which have not converted to zigzag technology. Also stubble burning which is major cause of environmental pollution should not be permitted and ought to be monitored under the supervision of the Administrative Department and clear directions should go out to the Deputy Commissioners of each district to ensure that no

one indulges in stubble burning. Also, Section 144 Cr.P.C should be imposed and no brick kiln should operate during that period. It is also made clear that in case violation is made within the area of a particular District, the Deputy Commissioner of that District will burden the responsibility to answer for that violation and apart from other administrative action, he will be held for contempt of this Court's order. This direction should be passed on clearly to the Administrative heads of the Districts. For the purpose Secretary Agriculture shall convene a meeting and apart from passing of these directions, take measures for strict compliance of the steps which are necessary for the smog to be curtailed”.

Order dated 03.12.2020:

“It has been stated in the report that at least 1200 more brick kilns have been converted to zigzag technology. A large number of brick kilns have been sealed which were operating on old technology. The number of smokes emitting vehicles which were challaned have also been given in the report and a substantial amount of fine has been recovered and 1108 vehicles were impounded during operation.”

XVIII: Fine Imposed on brick kilns:

Order dated 03.06.2021:

“Learned counsel for Judicial Water & Environmental Commission has pointed out that time and again sealing is being done of the brick kilns that were operated unlawfully but they continue to operate and there is no deterrence for them to shut down permanently or to convert to zigzag technology. It is directed that the officer of EPA are empowered to impose fine of Rs.50,000/- to Rs.100,000/- in case any violation is noticed in future.”

XIX: Control on Vehicular Emission:

The action against smoke emitting vehicles which includes the number of vehicles which have been checked have reached 39528, number of vehicles which have been challaned are 10466 and the amount of fine which has been imposed is Rs. 11,508,200/- number of vehicles which have been impounded have reached upto 2485. Relevant part of the report highlighting the action against smoking meeting vehicles is reproduced as under:

No. of Vehicles Checked	39528
No. of Vehicles Challaned	10466
Fine Imposed	11,508,200/-
Vehicles Impounded	2485

XX: Vehicular Inspection and Certificate System for Punjab:**Order dated 07.02.2020:**

“Dr. Wasim. the Director Planning Unit, Vehicular Inspection and Certification System appeared and according to him centers have been set up across Punjab to determine the efficiency and safety or the public vehicles. However, the remit of the authority does not extend to private vehicles which contribute 90% of the vehicular omission. For the purpose, systems ore being installed and will require some time to do so. However, according to him, the authority is closely monitoring the efficiency and safety of the public vehicles and a six-month inspection is carried out. Be that as it may, the Director shall file a report on the next date of hearing regarding the steps taken for the purpose and the standard operating procedures employed by the authority in this regard”.

Order dated 22.10.2020:

“Learned counsel for Water Commission apprised that the Environmental Protection Department did not have the capacity to undertake the challans of vehicles making hazardous emissions as directed by this Court on the last date of hearing. It is directed that the City Traffic Officer, Lahore shall issue directions to the traffic police to ensure that pollution emitting vehicles as indicated by the Environmental Protection Department are not permitted to ply on the roads. All such vehicles shall be impounded and dealt with in the manner specified by this Court in its order dated 09.10.2020. Therefore, the traffic police shall inform the officers of Environmental Protection Department to take the necessary actions. In this regard a mechanism shall be setup between the traffic police and the Environmental Protection Department and the said mechanism shall be placed before the Water Commission for approval.”

Order dated 02.11.2020:

“The learned counsel for the Judicial Water Commission has placed on record the minutes of the meeting pursuant to the directions issued by this

Court regarding smog is well as traffic congestion. The update of these meetings shall be filed before this Court on the next date of hearing. The Commission shall impress upon the CTO Lahore to ensure that the personnel of the traffic police are prepared to take strict action against the smoke emitting vehicles and imposing fines and impound them as directed by this Court on the previous dates of hearing. The latest report has also been submitted by the counsel for the Commission regarding action against smoke emitting vehicles which shows that the activity has been enhanced substantially and at least 431 vehicles have been impounded. It is directed that the campaign should be pursued vigorously in this regard by the traffic police. It has also been informed by the learned counsel for Water Commission that the meetings are due to be held and the report shall be filed on the next date of hearing.”

XXI:E-Challan on Vehicular Smoke Emission:

The Punjab safety authority has been submitting its weekly congestion and encroachment report and the Punjab safe City authorities has been successful in issuing EChallan for smoke emitting vehicles. The payment of a fine of Rs 2000 is being levied.

Order dated 06.03.2020:

“The learned counsel for the Chairman next contended that issuance of E-Challan system was stalled and require amendments in the Motor Vehicle Ordinance, 1965. These amendments have been proposed and approved by the Cabinet and have to be placed before the Provincial Assembly. Learned A.A.G shall seek instructions on the next date of hearing as to when these amendments shall be placed before the Provincial Assembly for being enacted into law. Some of the major reasons delineated in the report for congestion on the roads are under-age driving, driving by non-license holders, overloading and non-compliance of helmets by motorcyclists. It is directed the City Traffic Police Lahore in coordination with PSCA shall initiate a drive to impound such vehicles on the basis of data provided by PSCA which will ensure that the roads of Lahore are much safer place for all legitimate users. Further, the Excise & Taxation Department is directed to update the complete addresses of vehicle owners and link the data with data maintained by PSCA so that E-Challan system can be improved.”

XXII: Substandard Fuels and adoption of Euro IV:

That in context of substandard fuel 491 inspection was carried out and 139 fuel stations were found selling substandard fuel whereas 144 FIR's were filed and 64 persons were arrested lastly 143 fuel stations were sealed. Relevant part of the report is reproduced as follows:

Action	Progress
Fuel station inspections.	491
No. of fuel stations found selling substandard fuel.	139
FIRs	144
Persons Arrested	64
Sealed	143

Order dated 30.01.2020:

“The Deputy Director EPA further stated that a major source of smog and pollution was the fuel use in various vehicles in Punjab which had a high sulphur content. Fuel sulphur was the major contributor to the environmental pollution and it was imperative therefore that the standard of fuel being used in the vehicles plied in Pakistan be converted to a more refined form of fuel. The learned Asst. Attorney General present on Court's call is directed to file a report on the next date of hearing on behalf of the Minister for Climate Change of the Federal Government apprising the various steps taken by the Federal Government for the import of low-sulphur fuel for use in the vehicles”.

“According to the Deputy Director EPA, a Vehicular Inspection and Certification System has been introduced by the Govt. of the Punjab. However, the effectiveness of that system leaves a lot to be desired, One of the effective measures which can be taken by the Transport Department is to compel the vehicles running on diesel to install catalytic converters which are devices meant to be installed for the purpose of pollution control. In most cases, the drivers of diesel vehicles do not follow the compulsory requirement of installing these converters in their vehicles. The Asst. A.G shall ensure the presence of an officer of the Transport Department who is the In charge of the System referred to above on the next date of hearing”.

Order dated 07.02.2020:

“The learned Asst. Attorney General apprised this Court regarding steps taken by the Federal Government for adoption of Euro IV standards for diesel and petrol fuels. According to the representative of the Ministry of Climate Change, it falls within the authority of Ministry of Petroleum to do so. In this regard he has referred to an office memorandum whereby the Petroleum Division has been required to submit a summary to the Cabinet for approval. The Asst. Attorney General shall seek instructions from the Secretary Petroleum Division. Government of Pakistan and apprise this Court as to when the summary shall be placed before the Cabinet for approval. It is pertinent to mention that low-grade fuel is a major contributory of environmental pollution and comprises 45% of the pollution that afflicts our environment”.

XXIII: Fine Imposed on smoke emitting vehicles:

Order dated 02.10.2020:

“This is an application on behalf of Water & Environment Commission regarding the issue of low rate of challan being issued to vehicles which are emitting emission which is hazardous to the environment. **According to this application, vehicular emission contributes 43% to the smog in the atmosphere. Firstly, it has been contended by the learned counsel that there is no power in the Environmental Protection Department to impound these vehicles. however, since these vehicles are emitting hazardous pollutants in the environment, it is imperative that Environmental Protection Department should be given power to impound to those public transport vehicles which are unlit for being plied on the roads and are emitting hazardous emission in the environment. It is therefore directed that Environmental Protection Department, Transport Department as well as Traffic Police shall be empowered to impound these vehicles for a period of three days subject to the fulfillment of the technical specifications to be installed in these vehicles so that these vehicles should not be making hazardous emissions. Thereafter, as suggested by E.P.D, the owner of the vehicle shall be given 7 days time to comply with all the specifications. During that time, the documents of the vehicle shall be kept with the officer of E.P.D for further action in case the compliance is not made. Further, the Administrator of Lorry Adda. Lahore is**

directed to accommodate all such vehicles impounded by E.P.D. and the Transport Department and make temporary arrangements for these vehicles to be parked in Lorry Adda. The E.P.D/ Traffic department shall be empowered to levy a fine up to Rs.2000 on such violations.

Order dated 03.12.2020:

“The number of smoke emitting vehicles which were challaned have also been given in the report and a substantial amount of fine has been recovered and 1108 vehicles were impounded during operation.”

Order dated 11.12.2020:

“The report No. 77 has been submitted by the learned counsel for Water Commission. In this report, the actions taken against the brick kilns as well as the smoke emitting vehicles have been brought forth. It seems that substantial actions have been taken on the directions of this Court for the closure of brick kilns operating on old technology as well as smoke emitting vehicles which shall be continued as before.”

Order dated 24.02.2021:

“It also mentions the action taken against smog emitting vehicles against whom a fine of Rs.11,403,550/- has been imposed and recovered whereas 2463 vehicles have been impounded.”

XXIV: Strict Compliance of Non-motorized vehicles on Model Roads:

Order dated 02.10.2020:

“It is also submitted that the Commissioner Lahore has designated certain roads as model roads. For the purpose, it has been provided that public transport vehicles shall not be able to ply on these roads. These vehicles have been termed as nonmotorized vehicles. Since the Commissioner, Lahore has already passed an order, it is directed that strict compliance of this order shall be ensured by the Commissioner, Lahore and these vehicles shall not be allowed to enter or ply on the model roads so designated by the Commissioner.”

XXV: Installation of Dry Scrubbers in steel re-rolling mills:

The number of smokes emitting industries in the district of Lahore against which action was initiated and industrial units were sealed on emission of excessive smoke and particulate matter were 223. Action against smoke emitting industries is reproduced as follows:

Brief Description	Progress
No. of Inspections Conducted	715
Units working without emission control system	167
Steel Industry operating without scrubber	142
No. of units sealed on emission of excessive smoke / particulate matter.	223
No. of FIRs lodged on smoke emission /violation of PDMA directions.	78

Order dated 05.08.2020:

“The report mentions the update on the issue of pollution causal by steel melters. It has been informed that the Steel Melters Association met with the Chairman of the Water Commission and undertook to put in place certain instruments which are required to be installed so that the pollution can be curtailed substantially. A period of ninety days has been given to the steel melters to do the needful. A continued oversight shall be done by the Chairman Water Commission so as to follow up on the promise made by the Association on behalf of the steel melters”.

Order dated 24.02.2021:

“Report No.82 has been filed by the Water Commission in which various steps have been mentioned which have been taken by the Water Commission for the control of smog in Lahore. At least 223 industries were sealed for emitting environmental hazardous material as pollutants”

XXVI: Installation of Anti-Smog towers on experimental basis:

Order dated 02.10.2020:

“Dr. Quratulain Syed, D.G PCSIR has appeared and submits on behalf of the Federal Minister for Science & Technology that three to six months are required for the PCSIR in collaboration with Engineering

Development Board to develop anti smog towers in Pakistan. It is directed that PCSIR shall commence the work for development of anti smog towers and it is expected and hoped that the Minister for Science & Technology shall take personal interest in pushing ahead the project so that it can be completed within the timeline. A preliminary report shall be filed by D.G PCSIR within the next one month.”

XXVII: Sprinkling and mechanical cleaning on roads for controlling smog:

Order dated 07.02.2020:

“It has been apprised by Mr. Anis Ali Hashmi, A.A.G as well as counsel for WASA that Lahore Waste Management Company (LWMC) has the ability to carry out sprinkling and mechanical cleaning which is an essential ingredient in controlling environmental pollution. In this regard, the water being stored in the tanks built with the various mosques in Lahore can be utilized for the purpose. The learned Chairman Water Commission shall convene a meeting with the MD of LWMC as well as PHA to devise a plan for the water stored in those tanks to be utilized for the purposes of sprinkling and mechanical clinic. According to Deputy Director this part constitutes an important element in controlling the environmental pollution and smog which accumulates during winter season. A report to this effect shall be filed by both the LWMC as well as PHA and in that report a comprehensive plan shall be laid out for approval by this Court”.

Order dated 09.09.2020:

“In this regard the representative of E.P.A has produced extracts which show that modern technology in the form of antismog towers have been installed and are successfully operational in different cities. They have significantly contributed to lowering the level of smog and pollution in these cities. Learned Addl. A.G shall also assist this Court on this aspect after making inquiries from the department which is the most relevant for determining suitability of these towers. Mr. Usman Naeem, Country Economist of International Growth Centre (IGC) an NGO which is working in collaboration with LUMS has filed a report regarding proposed design for the anti-smog towers. He undertakes to assist this Court on the next date of hearing regarding effectiveness and evaluation of anti-smog towers which have already been set up in various cities of the world. The learned counsel for the petitioner as well as counsel

for Water Commission shall also assist this Court on the effectiveness of these towers and whether a direction should go out to the government for their erection in various parts of Lahore.”

XXVIII: Imposing of fine on Stubble Burning all across Punjab:

Order dated 30.09.2019:

“Notice, Learned A.A.G accepts notice and shall seek instructions from the Secretary Environment as well as Environment Protection Department, Government of the Punjab with regard to the steps taken with regard to the installation of the technology by the brick kiln owners so as to stop in time the smog being accumulated in the winter months. Also, an issue has been raised by the applicant regarding burning of the crops which is also a contributory to the smog”.

Order dated 30.01.2020:

“With regard to stubble burning, Mr. Ijaz Majeed Deputy Director, EPA apprised this Court the actions taken in this regard by the Environment Department. It was admitted by the Deputy Director that stubble burning was a major source of smog during the winter season. For the purpose, mechanized methods will be put in place by the Govt. of the Punjab so that the farmers and agriculturists do not have to resort to stubble burning. Be that as it may, it is directed that the Environment Department shall ensure that the stubble burning activities are not carried out during the period starting early October and the implementation of the measures to forestall such acts by the farmers will be made in coordination with the other departments of the Govt. of the Punjab. A fresh report regarding said measures shall be placed before this Court by EPA within a period of one month”.

Order dated 05.08.2020:

“It has been mentioned a meeting was held with regard to the smog issue in which the Secretary Agriculture, Govt, of the Punjab and others were present. It was decided that the Environment Protection Department shall write a letter to the Home Secretary, Govt, of the Punjab for issuance of an order under Section 144 Cr.P.C prohibiting the stubble burning etc. However, it is directed that Water Commission shall hold a meeting at least once a week to oversee the entire issue and Environment Protection Department is directed to write a letter

within the next three days on which the notification under Section 144 Cr.P.C shall be issued by the home Department. It has further been mentioned in the report that mechanized cutting of the stubble is also being undertaken by the Agriculture Department so that the farmers do not indulge in burning of crops which is a major cause of smog in the winter. This issue shall also be continued to be overseen by the Water Commission”.

Order dated 22.10.2020:

“The Water Commission has filed the follow up report No. 70. The primary concern of the report is regarding stubble burning and it has been mentioned that despite regular meetings under the chairmanship of the Chief Secretary Punjab and the Water Commission the act of stubble burning is continuously unabated. According to the report the agriculture department is not fully compliant of the directions of this Court. For the purpose a joint meeting of the Water Commission shall be held with the Senior Member Board of Revenue Babar Hayat, Environmental Secretary and D.G Provincial Disaster Management Authority. The Secretary Agriculture shall also join the meeting. In that meeting the directions of this Court shall be placed before the participants of the meeting by the Water Commission and who shall also be impressed with the urgency of the matter. It has been reported that a press conference was held by these officers and listed the actions that the Provincial Government shall appoint to take. However, the officers attending the meeting will be apprised by the Water Commission that substantial steps have already been taken on the directions issued by this Court and any further actions shall be taken by the office's of the Provincial Government under the directions of this Court. On the last date of hearing it was also directed that PDMA shall work in clear liaison with the Water Commission. It is made clear that any further action in this respect shall be jointly taken by the officers of the Provincial Government duly nominated and the Water Commission and a report shall be placed before this Court on the next date of hearing. The meeting shall be held on Monday at a convenient time and the A.A.G shall convey this order to the officers who shall be required to attend the meeting. Thereafter a joint press conference shall be held by the officers as well as the Water Commission in which the Press shall apprised of the steps taken on the directions of this Court as also to give publicity to the clear directions regarding stubble burning over a period of time in the past issued by this Court. The

A.A.G shall also make arrangements for the publication in the newspapers regarding directions issued by this Court with regard to the stubble burning. This publication shall be made during the next week for at least three consecutive days and will touch base with the relevant officer of the Govt. of the Punjab who shall ensure the publication to be made.”

Order dated 03.12.2020:

“The learned A.A.G states that the funds for construction of Data Darbar ablation tank have been released and it is likely to be completed soon. The Director PDMA appeared and states that teams were constituted for making a survey as directed by this Court on the last date of hearing. **It was indeed found that violations were being made by the farmers in respect of stubble burning. The team touched base with the Deputy Commissioner as well as D.P.0 of districts Khanewal and Nankana Sahib etc. and were apprised that FIRs have been registered against the persons involved in stubble burning and some of them had also been arrested. However, since the offence was bailable. It was difficult to create a permanent deterrence to the people of these areas to restrain them from stubble burning. It seems that the registration of FIRs is not enough and it would be appropriate that further deterrence be created to dispel the people to indulging stubble burning which is rampant during this month and which seriously contributes to smog. For the purpose it is directed that a fine of Rs. 50,000/- shall be imposed by the Deputy Commissioner of the concerned district and shall be deposited in the account maintained with the PDMA and shall be utilized for the purposes of the activities and official business being carried out by PDMA. This shall be conveyed by the Director PDMA as well as A.A.G to the D.Cs of the districts of Punjab for compliance.”**

XXIX: Ban on Polythene Bags and levying of fine on its use:

Many attempts over the years have been made to do away with the extremely hazardous polythene bags and their use which is rampant in all retail and wholesale business. According to studies, they are

not biodegradable and cause a litany of problems impacting the environment and so their use is being abandoned all over the world. They are extremely dangerous for the marine life which feeds at least 1 billion people daily. It was imperative, therefore, to enforce measures to prohibit use of these bags and to inculcate a behavioural shift away from their use in the general public. Restraining the manufacturers from producing them forthwith was not the answer, as that would have put a large section of the workforce out of employment. Thus, as a first step, a restraint was placed on their use in retail outlets in Lahore. For the purpose a timeline was given by the Court after which enforcement orders were to take effect. Over time, these measures have yielded remarkable results. The use of plastic bags has diminished to a large extent and simultaneously there is a realisation amongst the public that these bags pose a grave threat to our lives and must be disused. A paradigm shift has taken place not only environmentally but culturally as well. The order has now been extended to the entire Province of Punjab.

Order dated 07.02.2020:

“This is an application for compelling Govt. of the Punjab to place an immediate ban on the manufacturing, sale and usage of polythene bags in the Province of Punjab. Learned counsel for the applicant refers to two orders passed by this Court which required the ban to be imposed. Be that as it may, notices are issued to the respondents on this

application. In the first phase, **it is directed that all major departmental stores and wholesale outlets shall take immediate steps to stop the use of polythene bags at their stores. For the purpose, a time of two weeks is granted in which alternate arrangement shall be made by these stores to shift to alternate modes. The EPA is directed to convey this order to all major stores in Lahore who shall display the terms of the order at a prominent place to make it known to the shoppers and customers. A compliance report shall be filed by EPA in this regard. The Deputy Director EPA apprised this Court that oxobiodegradable bags have been made compulsory by the department for compliance by the major departmental store's in the city. This has yielded substantial results. However, it is imperative that the polythene bags in all forms ought to be banned completely as they are a major source of biodegradation and environmental degeneration. According to the officer, various meetings have been held of all the stakeholders and a complete implementation of the proposed ban is likely to take some time”.**

Order dated 24.09.2020:

“It was omitted in the last order that the ban on use of plastic bags has been extended in the whole of the Punjab. That order is being made today and a direction is issued to all concerned specially the Environmental Protection Department to enforce the ban at all cost. It is also ordered that the ban on the use of plastic bags shall be extended on the Motorways and for the purpose, E.P.D shall touch base with the Motorway police regarding service stations along the Motorways”.

Order dated 22.10.2020:

“Learned A.A.G has also placed on record the report of the D.G Environmental Protection Agency regarding implementation of this Court’s order of banning of plastic bags. The action taken in various directions has also been placed on record. It is directed that the action shall continue until the plastic bags are completely eliminated and a report shall be filed after fifteen days by the E.P.A.”

Order dated 11.12.2020:

“With regard to the action against use of polythene bags. It has been stated by the learned counsel for Water Commission that the sealing of

the premises is not a sufficient deterrence and in addition thereto suggests imposition of fine be also allowed to be made on retail outlets who are using polythene bags. It is clarified that in case a retail outlet is found violating the directions of this Court a certain period of time of one week should be given to that outlet to comply with the directions of this Court and thereafter the process of sealing should be done. Also the officers of Environmental Protection Agency shall be empowered to impose a fine between Rs.5000/ to Rs.20000/- on any retail outlet found involved in the violation.”

XXX: Restraining to Cutting of trees/orchards:

Order dated 02.04.2021:

“It is further directed that till the next date of hearing, no further trees shall be cut down by any of the sponsors, which intend to set up a housing society on and land either in their entitlement or any other till the next date of hearing. This order shall be conveyed by the learned Addl. A.G as well as Asst. Attorney General present in Court to the relevant authorities”.

XXXI: Data Collection of Industrial Units to control excessive emission of smoke:

Order dated 24.02.2021:

“Mr. Usman Naeem IGC/NGO has appeared and states that significant progress has been made for installation of the instruments in the steel and textile industries in and around Lahore. It is directed that Mr. Usman Naeem shall hold a meeting with learned Addl. A.G Mr. Anis Ali Hashmi and apprise him of the next steps to be taken and if at all there are any impediments in the way, learned Addl. A.G shall contact the relevant Government Department for easing out the process so that it can be expedited. Learned Addl. A.G shall also initiate steps so that Mr. Usman Naeem can also have a meeting with the Secretary Agriculture as there are certain important suggestions which are necessary to be shared with the Secretary in respect of control of stubble burning in the Province of Punjab.”

21. Courts in Pakistan have been at the vanguard of providing climate justice to the people. It must be

borne in mind that, in essence and as a primary duty, it is the obligation of the State which is tasked to take climate action and other decisions with negligible climate impacts. It is only the weak enforcement of climate policies and existing climate legislation that leads litigants to sue for violations of constitutional rights. In a recent case involving the establishment of new cement plants in the negative area falling within the Districts of Chakwal and Khushab, the Supreme Court of Pakistan referred to Water Justice in a case reported as D.G Khan Cement Company Ltd. v. Government of Punjab through Chief Secretary, Lahore and others (2021 SCMR 834) in following words:

“Water Justice

17. According to our National Climate Change Policy, 2012 water resources are inextricably linked with climate; this is why the projected climate change has such serious implications for Pakistan's water resources. Freshwater resources in Pakistan are based on snow and glacier-melt and monsoon rains, both highly sensitive to climate change. This will further exacerbate the already difficult situation of a water-stressed country facing demand increases due to population growth and increasing economic activity. To address the impact of climate change on water resources and to enhance water security, the Government of Pakistan has proposed Integrated Water Resource Management to provide regulatory frameworks, water licensing, slow action dams, artificial recharge especially for threatened aquifers, adoption of integrated water resource management concepts, and ensuring rational ground water exploitation by avoiding excessive pumping. Agriculture is central to human survival and is probably the human enterprise most vulnerable to climate change. The hydrological cycle is similarly likely to be influenced by global warming, necessitating the agriculture and

livestock sectors, particularly in rain-fed areas, to adapt to climate change. The World Water Forum, laying down the concept of water justice, declared³⁰ that the State should exercise stewardship over all water resources, and protect them, in conjunction with their associated ecological functions, for the benefit of current and future generations, and the Earth community of life.³¹ Because of the close interlinkages between land and water and the ecological functions of water resources, any person with a right or interest to use water resources or land has a duty to maintain the ecological functions and integrity of water resources and related ecosystems.³² The precautionary principle should be applied in the resolution of water-related disputes. Notwithstanding scientific uncertainty or complexity regarding the existence or extent of risks of serious or irreversible harm to water, human health or the environment, judges should uphold or order the taking of the necessary protective measures having regard to the best available scientific evidence.³³ Consistent with the principle in dubio pro natura, in case of uncertainty, water and environmental controversies before the courts should be resolved, and the applicable laws interpreted, in a way most likely to protect and conserve water resources and related ecosystems.³⁴ In adjudicating water and water-related cases, judges should be mindful of the essential and inseparable connection that water has with the environment and land uses, and should avoid adjudicating those cases in isolation or as merely a sectoral matter concerning only water.³⁵ Water justice requires appreciation that there are no easy, simple or singular solutions to the water crisis, and that water problems cannot be resolved through technical solutions alone but require broader recognition that they are inherently ecological, political and social issues simultaneously.”

22. Since this is an on-going supervisory jurisdiction with judicial directions, these petitions cannot be brought to an end for now. There is an overriding public interest which justifies the issuance of constitutional remedies to compel executive action to achieve climate goals. Much has been gained and

in order to sustain and entrench it, further supervision will have to continue.

Adjourned to **09.09.2021**.

(SHAHID KARIM)
JUDGE

Approved for reporting.

JUDGE

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Rqfaqat Ali