

Legal Framework for Promoting Environmental Justice in the Context of Climate Change: Highlighting Proactive Role of the Supreme Court of Pakistan



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Abstract: Climate change is one of the most pressing global issues, necessitating robust legal frameworks and judicial oversight to mitigate its impacts. Climate change poses significant threats to Pakistan, including increased frequency of extreme weather events, glacial melting, water scarcity and heat waves. As a developing country with a predominantly agrarian economy, Pakistan is particularly vulnerable to these impacts. This necessitates effective legal mechanisms and proactive judicial intervention to address climate change challenges. This paper examines the evolution of climate change law in Pakistan and analyzes key judgments of the Supreme Court that have shaped the nation's response to environmental challenges. The Supreme Court of Pakistan has played a pivotal role in interpreting and enforcing these laws, expanding the scope of environmental justice through landmark judgments. These judicial decisions have emphasized the protection of environmental rights and the necessity of climate resilience. By analyzing key Supreme Court rulings, the paper underscores the judiciary's contribution to advancing environmental justice and addressing the multifaceted issues posed by climate change.

Keywords: Legal framework, climate change, environment, judgments, justice, vulnerability, resilience, Supreme Court, right to healthy environment,

Introduction

Climate change poses one of the most significant challenges of the 21st century, with far-reaching impacts on the environment, economies, and societies worldwide. In Pakistan, a country highly vulnerable to the adverse effects of climate change, the pursuit of environmental justice has become paramount. Environmental justice, which seeks to ensure the fair distribution of environmental benefits and burdens, addresses the disproportionate impact of environmental hazards on marginalized communities. The legal frameworks and judicial

interventions in Pakistan play a crucial role in promoting environmental justice, particularly in the context of climate change.

Pakistan's legal system, through its legislative frameworks and judiciary, has taken significant strides to address the multifaceted issues posed by climate change. The legislative frameworks, including the Pakistan Environmental Protection Act 1997 and the National Climate Change Policy 2012, provide a foundation for regulating environmental protection and promoting sustainable development. However, the effectiveness of these laws largely depends on

their implementation and the judiciary's role in interpreting and enforcing them.

The Supreme Court of Pakistan has emerged as a key institution in the country's environmental governance. Through its landmark judgments, the Court has not only interpreted environmental laws but also expanded the scope of environmental justice. The judiciary's proactive stance, often termed judicial activism, has led to significant legal precedents that emphasize the protection of environmental rights and the need for climate resilience.

This research paper aims to explore the legal frameworks in Pakistan that promote environmental justice in the context of climate change. It will highlight significant judgments of the Supreme Court that have shaped the landscape of environmental law and policy in the country. By examining these judicial decisions, the paper will underscore the role of the judiciary in advancing environmental justice and addressing climate change challenges. Additionally, it will assess the effectiveness of existing legal frameworks and identify areas for further improvement to enhance climate resilience and ensure equitable environmental protection for all segments of society.

Climate Change Vulnerability of Pakistan

Pakistan is highly vulnerable to the consequent climate change because of global warming, due to its geographical location. Slightly north of the Tropic of Cancer and along the shore of the Arabian Sea, the string of deserts connecting Rajasthan of India, Thar and Balochistan of Pakistan and Dasht of Iran passes through the southern half of Pakistan. North of Pakistan is the junction of three world famous mountain ranges known as Himalayas, Karakoram and Hindukush which possess third largest mass of ice after the polar regions. There are more than 5000 glaciers in Pakistan territory having Volume of water in the frozen form to sustain our water supplies through melting process. Winter snowfall tends to nourish the melt mass of ice from glaciers but the balance is disturbed due to increased heat (Krishnamurti, 1987 and Rao, 1976).

Under global warming and changing climate,

Pakistan is no exception as both do not follow the political/geographical boundaries. Precipitation and thermal regimes in Pakistan have suffered changes especially in the recent two decades when global atmospheric temperatures have shown sharp jump. Pakistan enjoys diverse climate ranging from frozen ice caps in the north to burning deserts in the south (Rasul et al., 2005).

Following are major points regarding climate change vulnerability of Pakistan;

1. Changes in weather patterns

Climate change directly influences weather patterns, especially precipitation. With rising temperatures, there is greater surface evaporation leading to a greater concentration of water vapor in the atmosphere which results in heavier downpours. This can cause devastating floods when it rains in the mountainous areas (Trenberth [2011](#)).

2. Floods

Over the years, the occurrence of major floods has increased in Pakistan, causing huge losses to life and property. In August 2020, for example, just 3 days of heavy monsoon rains killed at least 90 people and damaged at least a thousand homes across Pakistan (Guardian [2020](#)).

Flash floods due to heavy monsoons tend to generally affect Punjab and Sindh provinces, while floods resulting from hill torrents tend to affect mainly the hilly areas in Khyber Pakhtunkhwa, Baluchistan and Gilgit Baltistan (Sayed and Gonzales [2014](#)).

3. Glacial lake outburst floods

A Glacial Lake Outburst Flood (GLOF) occurs when a lake formed by glacial melt overflows as the ice dam holding it suddenly bursts resulting in catastrophic flooding in downstream areas. As the climate warms, more and more glaciers around the world are experiencing increased melting (Zemp and Haeberli [2007](#)).

Pakistan is home to three mountain ranges in the north, namely Himalayas, Karakoram and Hindukush (Ashraf et al. [2012](#)), and has 7253 known glaciers, with 543 in the Chitral Valley alone. These glaciers feed rivers that represent

75% of the stored-water supply in the country (Craig [2016](#)).

4. Drought

Climate change and overexploitation of water resources exacerbate the frequency, severity and duration of drought events and associated impacts (Miyan [2015](#); Wilhite [2005](#)). Drought is a common phenomenon in Pakistan, known to occur at least thrice every decade (Anjum et al. [2012](#)). From the early 2000 onwards (Miyan [2015](#)), severe droughts in the country have mainly affected the provinces of Sindh and Balochistan (Ashraf and Routray [2015](#)).

Droughts tend to worsen food insecurity in semi-arid countries like Pakistan, where the economy depends on agriculture. Droughts can trigger undue migration, and cause famine and deaths (Miyan [2015](#)). Whereas in some parts of Pakistan, excessive rainfall is causing floods, in other parts, there is not enough rain.

5. Heatwaves

Mueller et al. [2014](#) showed that it is heat stress (and not high rainfall or floods as was popularly believed) that is most strongly associated with long-term human migration in rural Pakistan. High temperatures have been shown to lower agricultural yields in Pakistan (Rasul et al. [2011](#)) as well as to lower farm and non-farm income (Mueller et al. [2014](#)). The study finds that the probability of a non-migrant, male moving out of the village is 11 times more likely when exposed to extreme high temperatures (Mueller et al. [2014](#)).

6. Sea-level rise

Pakistan is among the countries most vulnerable to the impacts of rising sea levels with more than 10% of its population living in coastal areas (Rabbani et al. [2008](#)). The average rate of sea-level rise in Pakistan's coastal regions has been calculated to be approximately 1.1 mm per year (Rabbani et al. [2008](#)).

Legislative Framework on Climate Change in Pakistan

Following points are relating to legislative framework on climate change in Pakistan;

1. National Climate Change Policy

(2021)

The National Climate Change Policy (NCCP) of 2021 was a landmark document that laid the foundation for Pakistan's approach to addressing the multifaceted challenges posed by climate change. The NCCP outlines the country's strategic priorities for adaptation and mitigation, emphasizing the need for a comprehensive and integrated approach to climate resilience.

Objectives and Strategies

The NCCP's primary objectives include ensuring water, food, and energy security; protecting vital ecosystems; promoting sustainable urbanization; and strengthening disaster preparedness and response systems. Key strategies outlined in the policy involve:

- **Adaptation Measures:** Enhancing the resilience of agriculture, water resources, and coastal areas to climate impacts.
- **Mitigation Measures:** Promoting renewable energy sources, improving energy efficiency, and reducing greenhouse gas emissions.
- **Institutional Strengthening:** Building the capacity of relevant institutions to effectively implement climate policies.
- **Public Awareness and Education:** Raising awareness about climate change impacts and fostering a culture of environmental stewardship.

Implementation Mechanisms

The NCCP calls for the establishment of a multi-stakeholder National Climate Change Committee to oversee the implementation of the policy. It also highlights the importance of integrating climate change considerations into national development planning and sectoral policies (Government of Pakistan, 2021).

2. Pakistan Climate Change Act (2017)

The Pakistan Climate Change Act of 2017 marked a significant step in formalizing the country's commitment to addressing climate change through legislative means. The Act provides a robust legal framework for

coordinating national climate change policies and implementing adaptation and mitigation strategies.

Key Provisions

The Act establishes two pivotal institutions:

- **Pakistan Climate Change Council:** Chaired by the Prime Minister, this high-level body is responsible for overseeing the implementation of climate policies and ensuring inter-ministerial coordination. The Council includes representatives from federal and provincial governments, civil society, and the private sector (Pakistan Climate Change Act, 2017).
- **Pakistan Climate Change Authority:** This autonomous body is tasked with formulating and implementing projects and programs to mitigate and adapt to climate change. The Authority is also responsible for preparing national adaptation plans and monitoring compliance with international climate agreements.

Institutional Roles and Responsibilities

The Act delineates specific roles and responsibilities for federal and provincial governments, emphasizing the need for a coordinated and integrated approach to climate governance. It also mandates the preparation of periodic national communications to the United Nations Framework Convention on Climate Change (UNFCCC), detailing Pakistan's efforts and progress in addressing climate change (Pakistan Climate Change Act, 2017).

Financial Mechanisms

To support the implementation of climate initiatives, the Act establishes a dedicated Climate Change Fund. This fund is intended to mobilize resources from domestic and international sources, including grants, loans, and carbon trading mechanisms. The fund aims to finance projects that enhance climate resilience and reduce emissions (Pakistan Climate Change Act, 2017).

3. Provincial Climate Change Policies

In addition to national policies, provincial governments in Pakistan have developed their

own climate change strategies, tailored to regional vulnerabilities and priorities.

- **Punjab Climate Change Policy (2017)**

Punjab, the most populous province in Pakistan, launched its Climate Change Policy in 2017. The policy focuses on enhancing agricultural resilience, improving water management, and promoting renewable energy. It also emphasizes the importance of community-based adaptation measures and public awareness campaigns (Government of Punjab, 2017).

- **Sindh Climate Change Policy (2018)**

Sindh, a province particularly vulnerable to sea-level rise and extreme weather events, adopted its Climate Change Policy in 2018. The policy prioritizes coastal zone management, disaster risk reduction, and sustainable urban development. It also highlights the need for capacity building and research to support evidence-based decision-making (Government of Sindh, 2018).

4. National Determined Contributions (NDCs)

As a signatory to the Paris Agreement, Pakistan has submitted its Nationally Determined Contributions (NDCs) outlining its commitments to reduce greenhouse gas emissions and enhance climate resilience. Pakistan's NDCs emphasize a balanced approach to mitigation and adaptation, with a focus on sectors such as energy, agriculture, and forestry (NDC, 2023).

- **Mitigation Targets**

Pakistan's NDCs include specific targets for reducing emissions intensity and increasing the share of renewable energy in the national energy mix. The country aims to achieve a 20% reduction in projected greenhouse gas emissions by 2030, conditional on international support and financial assistance (Government of Pakistan, 2016).

- **Adaptation Priorities**

Adaptation priorities outlined in the NDCs include enhancing water and food security, protecting vulnerable communities, and

improving disaster management systems. The NDCs also stress the importance of integrating climate considerations into national and sectoral planning processes (Government of Pakistan, 2016).

Environmental Legislation

Pakistan has enacted various laws and regulations to protect the environment and regulate activities that may impact it. The Pakistan Environmental Protection Act of 1997 is the primary legislation governing environmental protection, pollution control and environmental impact assessment. Other relevant laws include the Environmental Protection Agency Rules, 2000 and the Pakistan Environmental Protection Agency Regulations, 2000. In addition, there is also provincial legislation like, Khyber Pakhtunkhwa Environmental Protection Act, 2014, the Punjab Environmental Protection Act, 2019, Sindh Environmental Protection Act, 2014 and the Balochistan Environmental Protection Act, 2012.

International Commitments

Pakistan has committed itself to various international environmental conventions and treaties, recognizing the importance of global cooperation in addressing environmental challenges. Some key conventions and treaties to which Pakistan is a signatory are enlisted as follows:

- 1. United Nations Framework Convention on Climate Change (UNFCCC):** Pakistan ratified the UNFCCC in 1994, demonstrating its commitment to addressing climate change at the global level. Through this convention, Pakistan participates in international negotiations and initiatives aimed at reducing greenhouse gas emissions and adapting to climate change impacts.
- 2. Kyoto Protocol:** As a developing country, Pakistan is eligible for support under the Kyoto Protocol's Clean Development Mechanism (CDM). The CDM allows Pakistan to host projects that reduce emissions, generating carbon credits that can be traded in international markets. This mechanism provides financial incentives for investments in renewable energy and other low-carbon technologies (UNFCCC, 1997).
- 3. Paris Agreement:** Pakistan is a signatory to the Paris Agreement, which aims to limit global warming to well below 2 degrees Celsius above pre-industrial levels, with efforts to limit the temperature increase to 1.5 degrees Celsius. As part of this agreement, Pakistan has submitted its nationally determined contributions (NDCs) outlining its targets for reducing greenhouse gas emissions and enhancing climate resilience.
- 4. Convention on Biological Diversity (CBD):** Pakistan ratified the CBD in 1994, committing to the conservation of biological diversity, sustainable use of natural resources and equitable sharing of benefits arising from genetic resources. The country has implemented various initiatives to protect its rich biodiversity and ecosystems.
- 5. Montreal Protocol on Substances that Deplete the Ozone Layer:** Pakistan is a party to the Montreal Protocol, which aims to phase out the production and consumption of ozone-depleting substances (ODS). By adhering to the protocol, Pakistan contributes to the preservation of the ozone layer and mitigates harmful effects such as increased UV radiation.
- 6. Stockholm Convention on Persistent Organic Pollutants (POPs):** Pakistan ratified the Stockholm Convention in 2005, committing to eliminate or reduce the production, use, and release of POPs, which are highly toxic chemicals that persist in the environment. By adhering to the convention, Pakistan aims to protect human health and the environment from the adverse effects of POPs.

These conventions and treaties reflect Pakistan's acknowledgment of the interconnectedness of environmental and climate change issues and the need for collective action to safeguard the planet for present and future generations. By participating in international agreements,

Pakistan contributes to global efforts to address environmental challenges and promote sustainable development.

The Proactive Role of the Supreme Court of Pakistan on Climate Change and Environmental Issues

The Supreme Court of Pakistan has taken a proactive stance on climate change and environmental issues, recognizing the critical need for judicial oversight to safeguard the environment and public health. Through landmark judgments and suo motu actions, the court has addressed various environmental challenges, including air and water pollution, deforestation, and the protection of natural resources. By establishing environmental tribunals and enforcing strict compliance with environmental laws, the Supreme Court has not only held governmental bodies accountable but also empowered civil society to participate in environmental governance. This judicial insight has been instrumental in promoting sustainable development and ensuring that environmental protection remains a priority in Pakistan's national agenda.

1. Formation Of Green Benches

In light of recommendations of the Bhurban Declaration 2012 titled 'A Common Vision on Environment for the South Asian Judiciaries' during South Asian Conference on Environmental Justice held on March 24-25 under the aegis of the Supreme Court of Pakistan. Various courts all over Punjab, Sindh, Balochistan and Islamabad have been dubbed as green courts while green benches have also been constituted to hear cases pertaining to the environment and the factors affecting it.

The chief justice of Lahore High Court has established a green single bench and green division bench. Similarly, all courts of senior civil judges-cum-judicial magistrates and of civil judges-cum-judicial magistrates at sub divisions have been declared as green courts. All courts of district and session judges in Punjab have also been declared the same. The chief justice of the Sindh High Court has also established a green single bench and a green

division bench for the purpose and has even nominated judges to grace the benches.

The provincial chief justice had established green courts in all districts of Sindh and had directed all senior civil judges, civil judges and judicial magistrates of the respective districts to handle cases related to the Sindh Building Control Authority and the Sindh Local Government Ordinance in these green courts.

The chief justice of Peshawar High Court has constituted a green division bench headed by the chief justice and comprising another judge, also nominated by him. The chief justice of Balochistan High Court has also constituted multiple green division benches. Chief Justice of the Balochistan High Court Justice Qazi Faez Isa headed the green bench in Quetta, while Justice Noor Meskanzai and Justice Muhammad Hashim Khan Kakar were members of the bench at Sibi. The chief justice of the Islamabad High Court has constituted a green single bench and a green division bench at Islamabad.

2. Committee for Enhancing Environmental Justice (CEEJ)

The following committee has been formed by august Supreme Court of Pakistan for enhancing environmental justice;

1. Hon'ble Mr. Justice Qazi Faez Isa, Chief
2. Justice of Supreme Court of Pakistan
Chairman
3. Hon'ble Mr. Justice Syed Mansoor Ali
Shah
4. Senior Most Judge, SCP
Member
5. Hon'ble Mr. Omar Sial, Judge HCS
Member
6. 4. Hon'ble Mr. Justice Hashim Kakar,
Judge HCB
Member
7. 5. Hon'ble Mr. Justice Miangul Hassan
Aurangzeb, Judge IHC
Member
8. Hon'ble Mr. Justice Ishtiaq Ibrahim, CJ
PHC Member
9. Hon'ble Mr. Jawad Hassan, Judge LHC
Member

3. Significant Judgments of the Supreme Court of Pakistan on Climate Change and Environmental Issues

The Supreme Court of Pakistan has played a pivotal role in shaping the country's environmental jurisprudence and addressing climate change through its landmark judgments. These judgments have reinforced the state's responsibility to protect the environment and uphold the constitutional rights of citizens affected by environmental degradation and climate change. This section delves into some of the most significant Supreme Court rulings on climate change and environmental protection in Pakistan.

i. Asghar Leghari v. Federation of Pakistan (2018 CLD 424)

The case of Asghar Leghari v. Federation of Pakistan (2018) is a landmark judgment in Pakistan's climate change jurisprudence. This case was initiated by a farmer, Asghar Leghari, who contended that the government's inaction on climate change violated his fundamental rights guaranteed under the Constitution of Pakistan.

Background and Issues

Asghar Leghari filed a petition in the Lahore High Court, arguing that the government's failure to implement the National Climate Change Policy of 2012 and the Framework for Implementation of Climate Change Policy (2014-2030) constituted a breach of his constitutional rights to life and dignity. He claimed that climate change posed a severe threat to agricultural productivity, water resources, and overall environmental stability in Pakistan.

Judgment and Directives

The Lahore High Court, in its landmark decision, recognized climate change as a reality and emphasized the government's constitutional obligation to protect the environment and the rights of its citizens. The court directed the federal government to:

1. Establish a Climate Change

Commission to oversee the implementation of climate policies.

2. Ensure the effective implementation of the National Climate Change Policy and the Framework for Implementation of Climate Change Policy (2014-2030).
3. Report regularly on progress made in combating climate change and its impacts.

Significance

This judgment authored by Hon'ble Mr. Justice Syed Mansoor Ali Shah is significant for several reasons. It marked the judiciary's proactive stance on climate change, emphasizing the state's duty to protect citizens' constitutional rights from environmental harm. The establishment of the Climate Change Commission facilitated better coordination and implementation of climate policies (Leghari v. Federation of Pakistan, 2018).

ii. D. G. Khan Cement Company Ltd. V. Government of Punjab (2021 S C M R 834)

Background and Issues

The case concerns a notification issued by the Government of Punjab under sections 3 and 11 of the Punjab Industries (Control on Establishment and Enlargement) Ordinance, 1963, which declared certain areas within the Districts Chakwal and Khushab as "Negative Area" where the establishment of new cement plants and the expansion of existing ones were prohibited. D.G. Khan Cement Company Ltd., which operates a cement manufacturing plant in the affected area, challenged the notification on several grounds, including jurisdictional issues, lack of scientific study on water levels, denial of the opportunity of hearing, infringement of the right to trade, and discrimination between cement manufacturers.

Judgment and Directives

The Supreme Court of Pakistan upheld the notification, finding that the Provincial Government had the authority to declare an area as a "Negative Area" under the Ordinance and that the decision was made in the public interest.

for organized and planned industrial growth. The Court emphasized the importance of sustainable development and the precautionary principle in environmental law, stating that the prohibition on industrial activities in the Negative Area was not absolute and could change if new circumstances arose. The Court also recognized the need for climate democracy and intergenerational justice in the context of climate change.

Significance

The judgment authored by Hon'ble Mr. Justice Syed Mansoor Ali Shah is significant as it reinforces the principles of sustainable development, precautionary principle, and environmental protection within the framework of industrial growth and planning. It acknowledges the state's authority to regulate land use for public welfare and the importance of considering environmental, social, and economic factors in such decisions. The Court's emphasis on climate democracy and intergenerational justice highlights the evolving nature of environmental jurisprudence and the role of the judiciary in addressing the challenges posed by climate change.

The judgment also underscores the importance of scientific and technical data in government decision-making and the deference courts must show to institutional competence in specialized matters. However, it also affirms the necessity of judicial oversight to ensure that the government does not exceed its mandate or manipulate scientific results.

In conclusion, the Supreme Court dismissed the petition, refusing leave to appeal, and upheld the notification restricting the establishment and expansion of cement plants in the designated Negative Area, emphasizing the need for sustainable development and environmental protection.

iii. Raja Zahoor Ahmed v. Capital Development Authority (2022 S C M R 1411)

Background and Issues

The Supreme Court of Pakistan addressed Civil Petitions Nos. 3347 to 3351, 4229, and 4263 of

2021, which arose from a consolidated judgment of the Islamabad High Court dated 16.02.2021. The petitioners challenged the Capital Development Authority's (CDA) decision to rescind an earlier decision to commercialize residential properties, asserting that their properties had acquired commercial status based on the earlier decision. The core issue was the legality of changing the status of properties from residential to commercial in violation of the Master Plan of Islamabad, as governed by the Capital Development Authority Ordinance, 1960.

Judgment and Directives

The Supreme Court held that the CDA's decision to commercialize the residential properties was taken without lawful authority and was in violation of the Master Plan, which could only be amended with the approval of the Federal Government. The Court found that no vested rights could be created under the earlier decision, and the doctrine of *locus poenitentiae* did not apply to the petitioners' case. The petitions for leave to appeal were dismissed, and leave was refused. The Court directed the CDA to ensure that adaptation, climate resiliency, and sustainability are factored into their plans, policies, and decisions to protect the constitutional rights of the residents of Islamabad and the people of Pakistan.

Significance

The judgment authored by Hon'ble Mr. Justice Syed Mansoor Ali Shah is significant for reinforcing the importance of adhering to the Master Plan in urban development and the role of urban planning authorities in ensuring orderly growth of cities. It emphasizes the necessity of planned urban development in the context of climate change and the need for urban development authorities to consider climate resiliency and sustainability in their decisions. The decision underscores the impact of climate change on fundamental rights and the constitutional obligation to incorporate adaptation and sustainability into policy decisions. The judgment also highlights the importance of protecting public welfare through careful urban planning and the prohibition

against using land for purposes other than those specified in the Master Plan.

iv. Shah Zaman Khan Vs. Govt. of Khyber Pakhtunkhwa (P L D 2023 Supreme Court 340)

Background and Issues

The Supreme Court of Pakistan addressed Civil Appeals Nos. 329 to 346 of 2022, arising from petitions challenging the judgment of the Peshawar High Court, Mingora Bench, regarding land within the area declared as protected forest under the Khyber Pakhtunkhwa Forest Ordinance, 2002. Private parties claimed ownership of lands within the protected area, while the Government of Khyber Pakhtunkhwa maintained that these lands were owned by the Forest Department. The central issue was whether civil courts had jurisdiction to adjudicate these claims, given the jurisdictional bar under Section 92 of the Forest Ordinance (Shah Zaman Khan Vs. Govt. of Khyber Pakhtunkhwa, 2023).

Judgment and Directives

The Supreme Court held that the private parties did not establish their ownership of the lands in question through official records or documents predating the 1976 Notification that declared the area as protected forest. The Court found that the High Court erred in referring the private parties to civil courts for adjudication, as civil courts lacked jurisdiction over matters relating to the implementation of the Forest Ordinance. The Supreme Court allowed the appeals filed by the Government and dismissed those filed by the private parties, emphasizing the importance of forest conservation and the need to address climate change.

Significance

The judgment authored by Hon'ble Mr. Justice Qazi Faez Isa, Chief Justice, is significant for affirming the principle of forest conservation and the importance of addressing climate change. It underscores the need to protect existing forests and the role of legislation like the Forest Ordinance in conserving ecological systems. The Court highlighted the vulnerability of Pakistan to climate change and the necessity

of legal frameworks that prevent the unsustainable exploitation of natural resources. The decision also reinforces the jurisdictional bar under the Forest Ordinance, limiting the role of civil courts in matters related to forest land and emphasizing alternative remedies provided within the Ordinance itself.

v. Public Interest Law Association of Pakistan v. Province of Punjab (2023 SCMR 969)

Background and Issues

The Public Interest Law Association of Pakistan (PILAP) filed a petition challenging the grant of small-scale mining licenses for minor minerals such as sand, gravel, and sandstone without considering environmental impacts. PILAP argued that under Section 12 of the Punjab Environmental Protection Act, 1997, Initial Environmental Examination (IEE) and Environmental Impact Assessment (EIA) reports are required for all projects, including mining. The Punjab Mining Concession Rules, 2002, did not mandate such environmental approvals, leading to the neglect of potential environmental damages (Public Interest Law Association of Pakistan v. Province of Punjab, 2023).

Judgment and Directives

The Supreme Court, led by Justices Syed Mansoor Ali Shah and Ayesha A. Malik, ruled in favor of PILAP. The Court emphasized that the Mines and Minerals Department (MMD) is responsible for obtaining IEE and EIA reports before initiating the bidding process for mining projects. The ruling mandates that:

1. **IEE and EIA Reports:** These reports must be obtained by MMD before the bidding process begins to ensure environmental considerations are integrated into project planning.
2. **Environmental Management Plan (EMP):** The EMP should be developed and enforced to manage and mitigate environmental impacts, with the EPA monitoring compliance.

3. **Climate Proof Mining Policy:** The mining sector must adopt policies to address climate change impacts, integrating climate risk into environmental assessments.
4. **Guidelines and SOPs:** MMD should develop clear guidelines and Standard Operating Procedures (SOPs) for obtaining environmental approvals and ensuring compliance.

Significance

This judgment authored by Hon'ble Ms. Justice Ayesha A. Malik reinforces the importance of environmental protection in mining operations. By mandating IEE and EIA reports before project bidding, the ruling ensures that environmental impacts are assessed and mitigated from the outset. The introduction of a climate-proof mining policy highlights the need for sustainable practices in the face of climate change. This decision sets a precedent for integrating environmental considerations into economic activities, promoting responsible and sustainable development in Pakistan's mining sector.

vi. Province Of Sindh v. Sartaj Hyder (2023 S C M R 459)

Background and Issues

The Supreme Court of Pakistan dealt with Civil Petitions Nos. 943 to 954-K of 2022, challenging interim orders by the High Court of Sindh regarding the constitution of Citizens Committees in flood-affected areas of Sindh. The High Court had ordered that these committees be headed by Civil Judges and work under the supervision of District and Sessions Judges. The petitioners, including the Province of Sindh, argued that this exceeded the High Court's jurisdiction and encroached upon the executive domain, as judicial officers were directed to oversee executive functions related to disaster management and relief work (Province Of Sindh v. Sartaj Hyder, 2023).

Judgment and Directives

The Supreme Court, while recognizing the exceptional circumstances due to the floods,

modified the High Court's orders. The Court held that the inclusion of judicial officers in the Citizens Committees was against the principle of separation of powers and was not practical or expedient. The Court emphasized the existing legal framework under the National Disaster Management Act, 2010, which already provides for the inclusion of civil society in disaster management efforts. The Supreme Court directed that the Citizens Committees shall not be headed by Civil Judges or supervised by District and Sessions Judges but shall continue to operate, including members of vulnerable groups, particularly women, to monitor relief work and provide necessary information to improve efforts by the District Disaster Management Authority (DDMA). The Court also required bi-weekly reports to be filed with the High Court on the progress of relief work and a report on the composition of the Citizens Committees to be filed with the Supreme Court within three weeks.

Significance

The judgment authored by Hon'ble Ms. Justice Ayesha A. Malik is significant for affirming the principle of separation of powers and clarifying the roles of judicial and executive branches in disaster management. It underscores the importance of civil society's participation in disaster management and the need for inclusive committees that represent vulnerable groups. The judgment also highlights the importance of a coordinated response to natural disasters and the effective implementation of existing legal frameworks. Additionally, the judgment addresses the broader issue of climate change and the need for a national adaptation plan to build resilience against future climate-induced disasters, emphasizing the protection of fundamental rights in the face of environmental challenges.

vii. Shehla Zia v. WAPDA (P L D 1994 Supreme Court 693)

Though primarily an environmental case, Shehla Zia v. WAPDA (1994) laid the groundwork for subsequent climate litigation in Pakistan by establishing the principle that the right to a clean and healthy environment is part of the right to

life under Article 9 of the Constitution of Pakistan.

Background and Issues

Shehla Zia, along with other petitioners, challenged the construction of a grid station by the Water and Power Development Authority (WAPDA) in a residential area of Islamabad. The petitioners argued that the electromagnetic field (EMF) emissions from the grid station posed serious health risks and infringed upon their constitutional right to life.

Judgment and Directives

The Supreme Court held that the right to life under Article 9 of the Constitution includes the right to a clean and healthy environment. The court emphasized that any development project must consider its environmental impacts and directed WAPDA to conduct a thorough Environmental Impact Assessment (EIA) before proceeding with the construction.

Significance

The Shehla Zia case is a foundational judgment in Pakistan's environmental jurisprudence. It established the principle that environmental degradation affecting public health and safety could be challenged as a violation of constitutional rights. This precedent has empowered citizens and environmental groups to seek judicial intervention in cases of environmental and climate-related concerns (Shehla Zia v. WAPDA, 1994).

4. Holding of International Conferences on Climate Change and Environmental Issues

The Supreme Court of Pakistan plays a pivotal role in advocating for and facilitating international conferences on climate change and environmental issues. Recognizing the global nature of environmental challenges, the court has actively promoted dialogue and collaboration through hosting and participating in such conferences. By convening experts, policymakers, and stakeholders from around the world, these conferences serve as platforms for sharing knowledge, fostering partnerships, and formulating strategies to address pressing

environmental concerns. Following are conferences:

A. Conference on Climate Change on the topic “Navigating Climate Governance: Executive Action and Judicial Oversight”.

The Law and Justice Commission of Pakistan under the auspices of Supreme Court of Pakistan held a conference on climate change on 8th June 2024 (Conference on Climate Change, 2024). The conference focused on climate justice and the road ahead, judicial tools and crafting relief, the Climate Change Authority, and questions of jurisdictional overlap. The Hon’ble Judges quoted as follows;

Hon’ble Mr. Justice Qazi Faez Isa, Chief Justice of Pakistan quoted that;

“We must also not lose sight of a most startling fact. Pakistan is amongst a score of countries which are disproportionately vulnerable to the consequences of climate change. To ignore the reality of climate change is to be unjust and it disregards future generations”. Hon’ble Mr. Justice Syed Mansoor Ali Shah quoted that ;

“Climate Justice links human rights and development to achieve a human-centered approach, safeguarding the rights of the most vulnerable people and sharing the burdens and benefits of climate change and its impacts equitably and fairly”.

Hon’ble Ms. Justice Ayesha A. Malik quoted that ;

“As climate change litigation gains momentum, legal systems will be faced with the complex interplay between state responsibilities and adverse environment impacts, as carbon emissions know no borders, and their ramifications are grossly uneven. The challenge lies in reconciling the disproportionate burden borne by nations least responsible for the crisis, yet most affected by its consequences”.

Hon’ble Mr. Justice Jawad Hassan quoted that ;

“The right to life can only be enforced if certain ingredients are present, food being the first and foremost. Pakistan’s Courts have repeatedly

held the right to food a necessity of life and thus an extension of the right to life. Its interpretation has been stretched to the extent of it being labelled an economic right”.

Honb’ble District Judge Mr. Muhammad Amir Munir quoted that;

“District Judges should give particular emphasis to consulting relevant conventions on environmental law and climate change when making decisions in any case. Recognizing the critical importance of addressing climate change, it is imperative that judicial decisions reflect and uphold the principles established in these conventions to promote sustainable and environmentally responsible outcomes”.

(see:
<https://scp.gov.pk/Conference2024/index.html>)

B. 4th Association of Asian Constitutional Courts (AACC) Conference on “Constitutional Environmental Rights” held in Seoul, Korea.

The 4th AACC Research Conference held from 27th May to 30th May 2024 in Seoul, Korea on Constitutional Environmental Rights (4th AACC Conference, 2024). The said conference was attended by Ms. Syeda Saima Shabbir, Senior Research Officer and Mr. Hamaish Khan, Research Officer, Research Centre, representing the Supreme Court of Pakistan. The Pakistani delegation actively participated in the conference and highlighted the role of Supreme Court of Pakistan regarding environmental rights.

The Pakistani delegation played a pivotal role at the 4th Association of Asian Constitutional Courts (AACC) Conference on "Constitutional Environmental Rights" in Seoul, Korea, showcasing Pakistan's advancements and contributions in environmental jurisprudence. The delegation highlighted landmark judgments and initiatives that underscored the Supreme Court proactive stance on environmental protection. Key cases such as those addressing air and water pollution, deforestation, and the conservation of natural resources were discussed, including *Asghar Leghari v. Federation of Pakistan* (2018 CLD 424), *Public*

Interest Law Association of Pakistan v. Province of Punjab (2023 SCMR 969), *Shehla Zia v. WAPDA* (P L D 1994 Supreme Court 693), demonstrating how the Supreme Court has interpreted and enforced constitutional provisions to uphold environmental rights. The delegation emphasized Pakistan's commitment to sustainable development through judicial insight, including the establishment of specialized environmental tribunals and the enforcement of strict environmental laws. By sharing these experiences, Pakistani delegation not only enriched the conference's discussions but also reinforced its role as a leader in promoting constitutional environmental rights across the globe.

(see: <http://www.aaccsrd.org/en/eventDtl.do>)

Institutions Assessing Climate Change and Environmental Issues

In addition to the Supreme Court of Pakistan, several other institutions play crucial roles in dealing with climate changes and environmental issues;

1. Pakistan Environmental Protection Agency (EPA):

Pakistan Environmental Protection Agency (Pak-EPA) has been established under section (5) of Pakistan Environmental Protection Act, (PEPA) 1997. Basic functions of Pak-EPA are, to enforce the PEPA-1997 at rules & regulations includes, to approve Environmental Impact Assessment (EIA), Initial Environmental Examination (IEE), to issue certificates for establishment of environment labs in the Islamabad Capital Territory.

Pak-EPA is mandated to prepare or revise, and establish the National Environmental Quality Standards (NEQS) with approval of Pakistan Environmental Protection Council (PEPC). It takes measures to promote research and the development of science and technology which may contribute to the prevention of pollution. Protection of the environment, and sustainable development. It identifies the needs for, and initiates legislation in various sectors of the environment. It provides information and guidance to the public on environmental matters.

Specify safeguards for the prevention of accidents and disasters which may cause pollution and encourage the formation and working of non-governmental organizations, community organizations and village organizations to prevent and control pollution and promote sustainable development. The Agency may undertake inquiries or investigation into environmental issues, either of its own accord or upon complaint from any person or organization (EPA).

(see: <https://environment.gov.pk/>)

2. Environmental Protection Tribunals:

Pakistan has established specialized environmental tribunals at both the national and provincial levels. The Environmental Protection Tribunals were constituted under the Environmental Protection Act, 1997. At present there are four Environmental Protection Tribunals at Lahore, Karachi, Peshawar, and Quetta. The Environmental Protection Tribunal is a final fact-finding authority in cases/issues related to environment as a whole. Complaints and appeals against the legal actions of the Environment Protection Agency are entertained as per Environmental Protection Act, 1997. The private individuals can also approach the Tribunal seeking relief for their grievances against the alleged polluters. The scope and object of the jurisdiction is laid down in Environmental Protection Act, 1997 (EPT).

International Organizations and Donor Agencies

In Pakistan, environmental conservation and sustainability efforts are bolstered by a range of international organizations and donor agencies. These entities play a crucial role in providing financial assistance, technical expertise and policy guidance to address pressing environmental challenges facing the country. Here are some key international organizations and donor agencies actively involved in environmental initiatives in Pakistan:

A. **United Nations Environment Programme (UNEP):** UNEP operates globally to promote environmental sustainability and

address environmental issues. In Pakistan, UNEP collaborates with the government and local stakeholders to implement projects related to biodiversity conservation, climate change adaptation, pollution control and sustainable development (UNEP).

- B. **World Bank:** The World Bank provides financial support and technical assistance for environmental projects in Pakistan. It focuses on areas such as water resource management, renewable energy development, urban pollution control and sustainable agriculture. The World Bank's funding helps Pakistan implement policies and programs aimed at mitigating environmental degradation and promoting green growth (WB).
- C. **Asian Development Bank (ADB):** ADB is another major donor agency supporting environmental initiatives in Pakistan. It finances projects to improve water supply and sanitation, enhance energy efficiency, develop sustainable transport systems, and strengthen environmental governance. ADB's investments contribute to Pakistan's efforts to achieve environmental sustainability and climate resilience (ADB).
- D. **Global Environment Facility (GEF):** GEF provides grants and funding for projects that address global environmental issues, including biodiversity conservation, climate change mitigation, land degradation, and sustainable forest management. In Pakistan, GEF supports initiatives to protect endangered ecosystems, promote renewable energy adoption, and build resilience to climate change impacts (GEF).
- E. **International Union for Conservation of Nature (IUCN):** IUCN is a global organization dedicated to nature conservation and sustainable development. In Pakistan, IUCN works closely with government agencies, civil society organizations and local communities to conserve biodiversity, restore ecosystems, promote sustainable land use practices, and mitigate climate change impacts (IUCN).

- F. **United Nations Development Programme (UNDP):** UNDP supports Pakistan in implementing environmental projects aimed at sustainable development and poverty reduction. It focuses on building climate resilience, promoting renewable energy adoption, strengthening environmental governance, and enhancing ecosystem services (UNDP).
- G. **Global Climate Finance (GCF):** GCF provides financial resources to support climate mitigation and adaptation projects in developing countries. In Pakistan, GCF funding is utilized for initiatives such as renewable energy development, climate-smart agriculture, sustainable urban infrastructure and enhancing climate resilience in vulnerable communities (GCF).

By working collaboratively, these institutions contribute to the protection of constitutional environmental rights, the enforcement of environmental laws and the promotion of sustainable development in Pakistan. Their collective efforts are essential for addressing environmental challenges, mitigating environmental risks and ensuring a healthy and sustainable environment for present and future generations.

Recommendations

1. Consolidation of all laws on environment and climate:

In order to effectively implement all laws relating to environment and climate, it shall be consolidated so that the dispute of jurisdiction shall be ended. Consolidating all laws on environment and climate into a unified framework is essential for enhancing regulatory clarity, compliance, and enforcement. This comprehensive approach involves integrating diverse legal instruments, policies, and standards that govern environmental protection, pollution control, natural resource management, and climate change mitigation. By harmonizing existing laws and closing regulatory gaps, this consolidation can streamline administrative processes, reduce legal ambiguities, and promote coordinated efforts across various

sectors and levels of government. It also facilitates the incorporation of international environmental agreements and best practices, ensuring a coherent and robust legal structure that addresses the multifaceted challenges posed by environmental degradation and climate change. Effective consolidation ultimately supports sustainable development, protects ecosystems, and fosters resilience against climate impacts, benefiting both present and future generations.

2. Punishments Of Offences Relating To Environment And Climate Change Shall Be Made Harsh

All offences relating to environment and climate shall be made cognizable and non-bailable. Punishments for offenses related to environmental degradation and climate change should be made harsh to deter harmful activities and ensure robust protection of our planet. Stricter penalties, including substantial fines, long-term imprisonment, and stringent sanctions, will underscore the gravity of such offenses and act as a powerful deterrent against illegal practices such as pollution, deforestation, and carbon emissions. Enhanced punitive measures can also include the revocation of business licenses, mandatory restitution, and community service focused on environmental restoration. By imposing severe consequences, we can compel individuals and corporations to adopt sustainable practices, adhere to environmental regulations, and contribute positively to the fight against climate change.

3. Use Of Suo Moto Powers by All Judicial Magistrates Of The Country Relating To Offences Against Environment And Climate

All judicial magistrates across the country shall be made sensitized to use powers under section 190(1) (c) CrPC on suo moto basis when any law related to environment or climate is violated within his jurisdiction. Use of suo moto powers to all judicial officers in the country regarding offenses against the environment and climate is a critical step towards proactive environmental justice. This empowers judges at all levels to independently initiate proceedings in response

to environmental violations without waiting for formal complaints, thereby enhancing the judicial system's responsiveness to urgent ecological issues. Such authority enables swift action against perpetrators, ensures immediate remediation of environmental damage, and promotes accountability among individuals and corporations. It also encourages judicial officers to be vigilant protectors of environmental laws, fostering a culture of environmental stewardship and compliance. By equipping the judiciary with broader suo moto powers, the legal system can more effectively address and mitigate the impacts of environmental degradation and climate change, ultimately contributing to the preservation of natural resources and the promotion of sustainable development.

4. Appointing of Heat Officers

With the increasing frequency and intensity of heatwaves due to climate change, it is essential to adopt proactive measures to protect public health and ensure environmental justice. One effective strategy is the appointment of Heat Officers, a role that has been successfully implemented in several countries to manage and mitigate the impacts of extreme heat.

1. Role and Responsibilities of Heat Officers

Heat Officers may have following role and responsibilities;

A. Heatwave Preparedness and Response

- **Planning and Coordination:** Develop and coordinate heatwave preparedness and response plans in collaboration with local governments, health agencies, and emergency services.
- **Public Alerts and Communication:** Issue timely heatwave alerts and provide guidance to the public on protective measures through various communication channels.

B. Vulnerability Assessment and Support

- **Identify Vulnerable Populations:** Conduct assessments to identify communities and

individuals most vulnerable to extreme heat, such as the elderly, children, outdoor workers, and low-income families.

- **Heat Relief Programs:** Implement and manage heat relief programs, including cooling centers, distribution of water and fans, and targeted assistance for vulnerable groups.

C. Data Collection and Monitoring

- **Temperature Monitoring:** Establish and maintain a network of temperature monitoring stations to track heat trends and identify hotspots.
- **Health Impact Surveillance:** Collect and analyze data on heat-related illnesses and deaths to inform policy and intervention strategies.

D. Public Education and Awareness

- **Heat Safety Campaigns:** Conduct public education campaigns on the dangers of extreme heat and how to stay safe during heatwaves.
- **Community Engagement:** Engage with community leaders, NGOs, and local organizations to promote heat resilience at the grassroots level.

2. Illustrations : Countries with Heat Officers

A. United States

- **Miami-Dade County, Florida:** Appointed its first Chief Heat Officer in 2021 to address the growing threat of extreme heat. The role involves coordinating heat response efforts, raising public awareness, and advocating for heat-resilient infrastructure (<https://health.wusf.usf.edu/2024-06-19/heat-wave-safety-tips-from-the-worlds-first-chief-heat-officer>).

B. Greece

- **Athens:** Appointed a Chief Heat Officer in 2021, tasked with developing strategies to mitigate the impact of heatwaves, including urban cooling projects and public education campaigns.

C. Spain

- **Seville:** In 2022, Seville became the first city to name and categorize heatwaves, appointing a Chief Heat Officer to oversee the city's heat response efforts, including public warnings and heat mitigation projects.

D. India

- **Ahmedabad:** Pioneered the Heat Action Plan in 2013, appointing heat officers to lead heat preparedness and response activities. The plan includes early warning systems, public awareness campaigns, and the creation of cooling spaces.

3. Implementation in Pakistan

A. National and Local Coordination

- **National Heat Officer:** Appoint a National Heat Officer to oversee and coordinate heat response efforts across Pakistan, ensuring alignment with national climate change policies and strategies.
- **Local Heat Officers:** Establish Heat Officer positions at provincial and municipal levels to address region-specific heat challenges and coordinate local response measures.

B. Integration with Existing Frameworks

- **Disaster Management Authorities:** Integrate the role of Heat Officers within existing disaster management frameworks, ensuring seamless coordination during heatwave events.
- **Health Departments:** Collaborate with health departments to monitor and manage heat-related health impacts, ensuring rapid response and resource allocation.

C. . Funding and Resources

- **Government Funding:** Allocate dedicated funding for the establishment and operation of Heat Officer positions, including resources for public awareness campaigns, cooling centers, and heat relief programs.
- **International Support:** Seek technical and

financial assistance from international organizations and climate funds to support heat mitigation initiatives.

D. . Public and Stakeholder Engagement

- **Community Involvement:** Engage local communities in the development and implementation of heat response plans, ensuring their needs and perspectives are addressed.
- **Private Sector Collaboration:** Partner with private sector entities, such as construction companies and urban planners, to incorporate heat resilience into infrastructure projects.

By appointing Heat Officers, Pakistan can enhance its preparedness and response to extreme heat, protecting public health and promoting environmental justice in the face of climate change. This proactive approach, modeled after successful initiatives in other countries, will help build resilient communities and reduce the adverse impacts of heatwaves.

Conclusion

It is inferred that, the legal framework for promoting environmental justice in the context of climate change has been significantly fortified by the proactive interventions of the Supreme Court of Pakistan. Over the years, the court has not only recognized the intrinsic connection between environmental sustainability, climate change and fundamental human rights but has also actively worked to ensure that these rights are protected and enforced. The Supreme Court's landmark judgments have played a crucial role in broadening the scope of environmental jurisprudence in Pakistan, interpreting constitutional provisions in ways that emphasize the state's obligation to protect the environment for current and future generations.

A key element of the Supreme Court's approach has been its readiness to initiate suo motu actions on environmental issues, reflecting its commitment to addressing environmental injustices even in the absence of formal complaints and also to ensure use the same powers at the level of District Judiciary across

the country. This judicial activism has been instrumental in bringing attention to critical environmental issues such as air and water pollution, deforestation, and the degradation of natural resources. By holding both governmental and private entities accountable, the court has reinforced the importance of adhering to environmental laws and regulations, thereby promoting a culture of compliance and responsibility.

The establishment of environmental tribunals under the guidance of the Supreme Court has further strengthened the legal infrastructure for environmental protection in Pakistan. These specialized tribunals provide a dedicated forum for the swift and effective resolution of environmental disputes, ensuring that justice is not only done but seen to be done. This move has empowered citizens and civil society organizations to actively engage in environmental governance, knowing that there is a credible and accessible mechanism for addressing their concerns.

The Supreme Court's role in promoting environmental justice has also extended to the international arena. By participating in and hosting international conferences on environmental rights and climate change, the court has facilitated the exchange of knowledge and best practices, reinforcing Pakistan's commitment to global environmental stewardship. These efforts have not only enhanced Pakistan's standing in the international community but have also contributed to the development of a more cohesive and effective global response to environmental challenges and climate change.

As climate change continues to pose unprecedented threats to ecosystems, economies, and societies, the Supreme Court of Pakistan's proactive stance on environmental justice is increasingly important. Its judgments and initiatives provide a robust legal foundation that can adapt to the evolving nature of environmental threats. By continuing to champion environmental rights, the Supreme Court can help ensure that Pakistan navigates the complexities of climate change with resilience and justice at the forefront.

Thus, the proactive role of the Supreme Court of Pakistan in promoting environmental justice serves as a powerful testament to the potential of judicial institutions to drive positive change. By leveraging its authority to protect environmental rights and promote sustainable development, the court has set a precedent that underscores the vital role of the judiciary in addressing one of the most pressing issues of our time. This comprehensive approach to environmental justice not only benefits the people of Pakistan but also contributes to the broader global effort to combat climate change and protect our planet for future generations.

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