

Bridging the Gap: Implementation Challenges in Pakistan's Climate Change Legal Regime

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Abstract

The country is also among the most climate-vulnerable nations in the world, and emits less than one per cent of global greenhouse gas emissions. The catastrophic floods of 2022, which impacted approximately 33 million people in Pakistan and resulted in losses of more than USD 30 billion, highlighted the vast disparity between Pakistan's climate legislations and action on the ground. The present article critically analyzes the legal approach to climate change in Pakistan, from the Pakistan Environmental Protection Act 1997 to the National Climate Change Policy 2012, the Framework of Implementation of Climate Change Policy 2014–2030, and Pakistan Climate Change Act 2017, along with the paradigm changing judicial interventions in *Shehla Zia v WAPDA*, *Leghari v Federation of Pakistan* and *D.G. Khan Cement Company Ltd v Government of Punjab*. Using a comparative and doctrinal approach, the article places Pakistan under the lens of India, the United Kingdom, the United States and the Netherlands, to look for some lessons regarding institutional design, carbon budgeting and rights-based adjudication. The analysis shows that the central implementation gap in Pakistan is due to four interlinked failures in the

constitution: constitutional fragmentation and federalization after the 18th Amendment, lack of enforceability, penal and monitoring aspects in the 2017 Act, weak institutional capacity and the lack of political will to ensure compliance of the judiciary. Finally, there is a repositioning of the Pakistan Climate Change Authority and Fund in action, harmonization of federal-provincial mandates, enforceability of a UK-style carbon budgeting and the integration of climate justice into the Pakistani Constitution as key aims of the reform agenda.

Keywords: Climate change law, Pakistan Climate Change Act 2017, Climate litigation, Leghari v Federation of Pakistan, Environmental federalism, Climate justice, Comparative climate law

1. Introduction

Climate change is now part of the mainstream of international environmental talking points and the main global constitutional and human rights cases. It is not just a theoretical idea for Pakistan. However, in 2022 the German-watch Climate Risk Index identified Pakistan as the worst climate-hit country due to the monsoon-floods that submerged one-third of the country, killing nearly 1,700 people and displacing almost eight million people.

Pakistan's climate dilemma is widely recognized: a country that produces just a small fraction of global emissions is being disproportionately affected by climate change-induced loss and damage, and its climate laws, policies, and strategies that aim to adapt and mitigate climate change are little acted upon. Legislative ambition hasn't been on the lack side in Pakistan. The National Climate Change Policy 2012, with its associated Framework for Implementation 2014-2030, was the first comprehensive statements of adaptation and mitigation priorities and in 2017, Pakistan's first dedicated primary legislation on climate change, the Pakistan Climate Change Act 2017, was enacted. Judicially, Pakistan has now created one of climactic law's international landmarks in the form of the Lahore High Court case of Leghari v Federation of Pakistan, which is also often referred to as a foundational rights-based climate case which joined the milestone Dutch Urgenda litigation.

But, legislative intent and judicial creativity have not yet come into being. People who have commented on the 2017 Act have indicated it is a "tiger without teeth" – an institution defined by that does not have binding enforcement, penal or monitoring powers. In this article, I examine that gap between implementation. It asks: what is the cause of the regionally relatively progressive

legislative and judicial bases of climate change law in Pakistan being plagued with severe implementation deficit and what lessons can be learnt from the respective experiences of India, United Kingdom, United States and Netherlands for remedial action?

The article is divided into seven parts. Part 2 introduces an overview of the conceptual and international legal foundation for domestic climate law. In part 3, an historical overview of the internal climate change climate in Pakistan is provided. Multiple contributions by the judiciary in climate governance in Pakistan are discussed in Part 4. Part 5 explores climate law and litigation in India, the UK, USA and the Netherlands by conducting comparative analyzes. In part 6, the structural, institutional, financial, and political barriers to the implementation of fewer deaths and injury even in the face of flooding in Pakistan in 2022 are outlined. At the end of the article, you will find a few recommendations for reform, in Part 7.

2. Conceptual Framework: Climate Change Law and Governance

Climate Change Law is an area of law that is hybrid, integrating aspects of international environmental law, constitutional and human rights law, administrative law and now, to a greater extent, private or corporate law. The distinction at its core makes two distinct points, one entrenched in comparative scholarship: first, between mitigation and adaptation law, which cover reducing greenhouse gas emissions and resilience to climate impacts that signify mitigation attempts are futile, respectively; and second, that mitigation is inherently political while adaptation is more essentially humanitarian ends. However, from the history of Pakistan, as seen throughout this article, the government has been using the adaptation approach for years while the mitigation approach has remained weak, and is a sensible approach given the country's low-emission status but high exposure, as the government will soon face drastic measures if the situation does not improve considerably.

The second conceptual axis is with reference to the source of legal obligation. There are two types: some are derived from the domestic effects of binding international treaty requirements; others emerge from constitutional rights cases where climate obligations are being incorporated into existing rights and entitlements to life, dignity and a healthy environment, but with no explicit mention in the legislation. The second way follows the jurisprudence in Pakistan, which from the case of *Shehla Zia v WAPDA* placed environmental and subsequently climate protection within

the fundamental right to life (under Article 9), read with the right to dignity (under Article 14) of the Constitution of the Islamic Republic of Pakistan 1973.

Last but not least, "implementation" is a controversial term. It goes beyond speeches and simple proclamation of subordinate legislation and rules, to the provision of adequate institutions, monitoring and reporting systems, effective enforcement and penalties for failure to comply, and lasting political commitment, despite changes of government. At each of these levels, this article contends, Pakistan's climate change legal regime remains no match.

3. The International Legal Framework and Pakistan's Obligations

It is quite impossible to imagine Pakistan's internal system without considering its international obligations. Pakistan has ratified the UN Framework Convention on Climate Change 1992, the UNFCCC 1997 Kyoto Protocol and is a party of the UN Framework Convention on Climate Change (UNFCCC) Paris Agreement 2015 where it submitted its first NDC in 2016 and an updated NDC in 2021. The Updated NDC unanimously agrees to the 50 per cent reduction in the projected emissions by 2030 – with 15 per cent to be drawn from domestic investments and 35 per cent from climate finance. The conditionality is evidence of the financing need explored in more details in later parts of this article. In the most recently submitted NDC (3.0), Pakistan plans to step this indicator to 2035 and also recognizes its low ranking on the index for readiness and vulnerability of Notre Dame Global Adaptation Initiative (NDGI), which is Pakistan. In Pakistan's latest NDC (3.0), the same is extended to the year 2035 and Pakistan admits that it has a low ranking on the index for readiness and vulnerability for Notre Dame Global Adaptation Initiative (NDGI).

These are part of a larger body of customary and soft-law principles, such as the precautionary principle and the polluter pays principle, embodied in the Rio Declaration on Environment and Development 1992 (which is a product of the 1972 Stockholm Declaration on the Human Environment). As shown in Part 4, these principles have been imported in the Pakistani case law for the interpretation of the Constitution, and they have been similarly followed in Indian case law (as found in Part 5). A common thread is that adherence to international treaties is legitimate, but it can be only a first step toward getting climate governance working: what makes the difference is the domestic law and institutions framework that support and empower those treaties to give them binding and enforceable force.

4. Evolution of Pakistan's Domestic Climate Change Legal Regime

4.1. Foundational Environmental Legislation

The framework of environmental laws in Pakistan dates back many years before the environmental protection laws were enacted. Federal and provincial Environmental Protection Agencies were introduced in the Pakistan Environmental Protection Ordinance 1983 and the National Conservation Strategy of 1992, which was drafted in the wake of Pakistan's involvement in the Rio Earth Summit, was the first comprehensive policy document. This ordinance was superseded by the Pakistan Environmental Protection Act 1997, which is the main legislation for Environmental Impact Assessment, pollution control and Environmental Tribunals. Equally importantly, the 1997 Act pre-dates the mainstreaming of climate change as a specific policy concern and, thus, does not have specific sections dedicated to aspects of GHG mitigation, carbon budgeting and/or climate adaptation planning.

4.2. The Eighteenth Amendment and Federal Fragmentation

The most significant attempt towards constitution of the environmental and climate governance structure was the Constitution (Eighteenth Amendment) Act 2010 that eliminated the Concurrent Legislative List and handed over environment and other structures such as health, education and disaster management to provinces. Subsequently, environmental protection laws were passed by each province – the Punjab Environmental Protection Act 1997 (amended), the Sindh Environmental Protection Act 2014, the Khyber Pakhtunkhwa Environmental Protection Act 2014 and the Balochistan Environmental Protection Act 2012. Devolution was a legal/constitutional and political requirement, but it meant the multi-sector and multi-lateral nature of climate change had to be handled on a national level. In recent years, many scholars have touched upon the Pakistan Climate Change Act 2017 and pointed to the delayed allocation of environmental powers in the privileges of the provinces after the Eighteenth Amendment as a point of ongoing conflict between the federal and provincial governments.

4.3. The National Climate Change Policy 2012 and Implementation Framework

In 2012, Pakistan stood up to the challenge with its National Climate Change Policy, followed by the Framework for Implementation of Climate Change Policy 2014-2030 in 2014, which converted

the generic adaptation and mitigation targets outlined in the Climate Change Policy into sector specific action points and timelines – albeit the timelines were nominal. It's the government's own error in enforcing this Framework that is the root cause of the Leghari litigation, which is the most impactful judicial action in Pakistan's climate governance so far, as shall be discussed in Part 4 below.

4.4. The Pakistan Climate Change Act 2017

The Pakistan Climate Change Act 2017 (Act X of 2017) is Pakistan's first specific primary law specifically aimed towards meeting Pakistan's climate change commitments under international climate agreements. The two institutional pillars set up under the Act are Pakistan Climate Change Council (led by Prime Minister), who will approve and monitor policy at both federal and provincial levels, and the Pakistan Climate Change Authority (PCCA), which will be pulling technical documentation, design and analysis of policy and coordinate. The Act has also established an Act's "Climate Change Fund" to raise domestic and international resources for both adaptation and mitigation projects.

Looking at them on paper they would constitute the basic components of a working climate governance architecture. Legislative scrutiny to date of the Act has TENDERLY highlighted the same structural fault in that the Act, while setting up institutions, lacks the basic elements of implementation, enforcement, and prosecution largely in the form of subordinate legislation, which in the main, has not been made. Some commentators have even called the legislation a ‘tiger with no teeth’ – a 2000 cliché that clearly represents its effort to have been ineffective unless backed by enforceable provisions. The other related failure is the lack of a scientifically calculated and statutorily agreed carbon budget as identified in similar UK legislation, outlined in Part 5.2, and of a requirement for parties to hold themselves to account and report on their progress as awarded to the UK's Secretary of State.

4.5. Nationally Determined Contributions and Climate Finance

However, Pakistan's climate ambition, as expressed through its two country-specific plans – its Updated NDC 2021 and NDC 3.0 – is highly reliant on IFI climate finance, with the Financial Cost of Adaptation and Mitigation (CCF) for 2023-2030 estimated at USD 348 billion, with both value of disbursement and domestic private sector contribution appearing low. Another noteworthy

absence from the federal-provincial fragmentation observed above is meaningful involvement in the preparation of the federal NDC by the provinces, which currently have their own climate policies or action plans by all three of the provinces in addition to Azad Jammu and Kashmir, and also G-B. At the very least, the 2025 analysis of the NDC process by the Jinnah Institute notes that significant provincial input into NDC preparation has been lacking, so far as it stands, to date.

5. Judicial Activism and Climate Litigation in Pakistan

Given the lack of a comprehensive statutory mechanism for enforcement of climate laws, the judiciary, specifically the superior courts having public interest jurisdiction in Article 184(3) and Article 199 of the constitution, is now the main instrument for climate accountability in Pakistan.

5.1. Shehla Zia v WAPDA: The Constitutional Foundation

The case which laid the groundwork for the current case is Shehla Zia vs WAPDA, which case was filed by residents of Islamabad regarding the construction of a high voltage electricity grid station imposing health risks. Justice Saleem Akhtar, in the ruling, held that the quintessential meaning of the word “life” in the Constitution of Pakistan was not limited to vegetative life, but extended to enjoyment of amenities and facilities, which were necessary for a person to have his life with dignity. The Court also adopted the precautionary principle, which was previously reflected in Principle 15 of the Rio Declaration, which provided that “scientific uncertainty should not be used as a reason for postponing measures”. Shehla Zia also gave legal cover for the maintainability of PIL filed regarding environmental issues of public importance under Article 184(3) before which after Leghari was filed, climate-related litigations could have been a possibility otherwise.

5.2. Leghari v Federation of Pakistan: Climate Justice as a constitutional principle

Leghari v Federation of Pakistan had its origin in the petitioner, as a farmer/law student from Punjab, questioning the absence of implementation of the National Climate Change Policy 2012 and its Implementation Framework, as this endangered his family's farming viability and also his fundamental rights to dignity and life. In a First Order dated 4th Sept 2015, Justice Syed Mansoor Ali Shah, in his capacity as a State member of the Green Bench of the Supreme Court of Pakistan, considered climate change as an emerging issue of the times and held that the inaction and sloth

of the State in making the Framework operational infringed on the fundamental rights of the citizens. The Court ordered that the federal and provincial ministries identify the climate change focal points, draw up prioritised lists of adaptation action points and, in a supplementary order dated 14 September 2015, constituted a twenty-one-member Climate Change Commission to keep an eye out for compliance.

Leghari is important on three additional fronts. Firstly, it formulated an original doctrine, acknowledging the link between human rights and development to secure the rights of the weakest for the enjoyment of a climate adequate for the conservation and enhancement of their natural resources, as well as establishing a sub-doctrine concerning water justice. Second, and more importantly, in its follow-up order of 25 January 2018, the Court recorded the completion of 66% of the priority actions identified in the Implementation Framework, between September 2015 and January 2017, to institutionalise an ongoing judicial-executive link in relation to climate compliance. Third, the persistent focus of international scholarly attention on Leghari as a leading rights-based climate litigation from the Global South, which echoes the Dutch litigation of Urgenda, in stature. Thirdly, Leghari has received consistent international scholarly attention as a leading rights-based climate adjudication from the Global South and is on a par in its stature with the Dutch Urgenda litigation discussed in Part 5.4 below.

5.3. D.G. Khan Cement and the Extension of Environmental Rights

Mansoor Ali Shah, once again, headed the Supreme Court, which confirmed a government-cement guideline issued by the Punjab government, barring a new or enlarged cement plant in the environmentally sensitive Cement "Negative Areas" of the Chakwal and Khushab districts, saying that the constitutional right to trade (under Article 18) cannot be used as a basis for contesting the order. The Court made a point of doing this explicitly in the context of fragility of the affected area, positioning itself in the wider frame of reference in the context of climate change, and articulating a concept of intergenerational climate justice, where the judiciary has obligations to future generations to shield them from climate change. The judgment is cast as introducing not just an anthropocentric, rights-based system, but a rights-based system that also asserts that environmental protection has intrinsic value, "[making] side-by-side comparisons with the rights-of-nature jurisprudence in other parts of the Global South." The Supreme Court has consistently cited support for regulatory measures that have benefited the environment in previous cases, such

as Cherat Cement Co Ltd (CSSL) v Federation of Pakistan and Khurshid Soap and Chemical Industries (Pvt) Ltd (KSCP) v Federation of Pakistan.

5.4. The Limits of Judicial Climate Governance

Despite these successes, the judicial climate governance landscape in Pakistan has been recognized as constrained by certain structural factors. It is only courts that can order nomination of focal persons, formation of monitoring commissions and the submission of compliance reports and cannot be used to provide the missing penal and enforcement provisions in devolved environmental laws; cannot compel provincial legislatures to harmonise devolved environmental laws; and cannot be used to appropriate budgetary funds. This argument would have it that climate litigation is, rather, than simultaneously another symptom of the gap in the implementation of the law, it is also a threat to it.

6. Comparative Perspectives: India, the United Kingdom, the United States, and the Netherlands

Comprehensive comparison sheds light on the structural options the Pakistani government has and highlights the possibility of replacing or not replacement of foreign options in Pakistan's federal and developmental framework.

6.1. India: Precautionary and Polluter-Pays Foundations

The doctrine of environmental jurisprudence in India has existed before Pakistan, and has had direct influence on Pakistan. The Supreme Court of India in the case of *M.C. Mehta vs Union of India* gave a definition to the doctrine of absolute liability of enterprises engaged in a hazardous activity in the context of an incident where hazardous gas had leaked in Delhi. In *Vellore Citizens Welfare Forum v Union of India*, Supreme Court held that the 'precautionary principle' and the 'polluter pays principle' constitute an integral part of the law of the land as two fundamental elements of 'Sustainable Development', in relation to the pollution of tannery activities in the River Palar, Tamil Nadu. These precedents have been followed in recent years by the Uttarakhand High Court granting rights of nature to the Ganges and the Yamuna in the case of *Mohd Salim vs State of Uttarakhand*, the reasoning of which was picked up by the Pakistan Supreme Court in the *D.G Khan Cement* case as discussed above. The National Green Tribunal of India (under the National

Green Tribunal Act, 2010) has sought to compare itself with a specialised national environmental adjudicatory body with an institutional structure of enforcement powers and capacities that India's provincial Environmental Tribunals (under the Environment Protection Act, 1997) have yet to replicate.

6.2. The United Kingdom: Statutory Carbon Budgeting

The United Kingdom's Climate Change Act 2008 provides the most obvious comparison with a binding, self accountability-based statutory framework for climate change that critics say the Pakistan Climate Change Act 2017 is missing. The UK Act makes a clear statutory commitment to reducing the net carbon footprint footprint for the UK by at least one hundred per cent by 2050, an increase, from eighty per cent in the Climate Change Act 2008 (2050 Target Amendment) Order, to the hundred per cent level. The Act also introduces successive 5 year carbon budgets at least 12 years ahead, an obligation for the Government to make a statement on emissions to Parliament each year and the Climate Change Committee, an independent expert body to advise on the carbon budgets and report annually on progress made by the Government which should be acted on within 60 days. All three features are essential in achieving such a framework: binding targets, independent oversight, and mandatory reporting to the legislature, and these are what Pakistan commentators argue the 2017 Act lacks. In the absence of a binding target, mandatory reporting to the legislature and an independent compliance monitoring body, it is these features that are missing from institutions of the 2017 Act that instead have advisory and coordinating powers.

6.3. The United States: Administrative Law and Climate Regulation

The U.S. on the other hand presents an alternative trajectory in which natural resource protection has emerged primarily through the implementation of existing pollution-control laws, rather than dedicated climate laws. The landscaping regulation of the Clean Air Act required the EPA to render an endangerment finding, and if it found that greenhouse gases are an endangerment, to regulate accordingly. The US Supreme Court, in *Massachusetts v Environmental Protection Agency*, ruled that the EPA was required to make an endangerment determination after failing to provide a reasoned scientific basis for its inaction, and that if greenhouse gases are an endangers, they must be regulated under the Clean Air Act. The case is relevant for Pakistan as a way to conceptualise GHG emissions as pollutants in an existing framework Act of the environment—namely, the

Pakistan Environmental Protection Act 1997—in pending a comprehensive and detailed Environment Act on GHG emissions. In the years following, this lopsided development of successful child rights litigation, even in the face of an unlikely constitutional or statutory provision, such as Pakistans Article 9, has shown the usefulness of rights-based climate litigation without an appropriate hook, as happened in *Janice Bono v Wisconsin* with Section 2. The subsequent path of what happened to climate litigation in the United States, from *Juliana v. United States* (which tried and failed on a constitutional level with the children's rights being invoked), likewise underscores the practical limits of rights-based climate litigation without an empathy-inducing constitutional or statutory provision of the kind embedded in Article 9.

6.4. The Netherlands: Urgenda and Human Rights-Based Mitigation Duties

Another court ruling most commonly cited with Leghari is the decision of the Dutch Supreme Court on *Urgenda Foundation v State of the Netherlands* that requires the Netherlands to cut its GHG emissions by at least 25 percent below 1990 levels by the end of 2020. The Dutch Supreme Court founded this mitigation duty on Article 2, giving the right to life, plus Article 8, which provides the right to private life, with reference to the state's obligations under the UN Framework Convention on Climate Change (UNFCCC), and also with its own, non-delegable, responsibility to prevent dangerous climate change. When it comes to domestic courts implementing international climate obligations, the two most significant examples are the *Urgenda* lawsuit and the *Leghari* lawsuit, albeit with the *Urgenda*'s action being a clean-sheet emission reduction against the *Leghari*'s being more procedural, adaptation-focused, and complaint monitoring, in part owing to the different emission scenarios and developmental backgrounds of the two states.

6.5. Comparative Lessons for Pakistan

Each of these makes three comparisons. One, from the UK, the importance of binding, numerically-defined, monitored goals, vis-à-vis open statement policy goals. Second, India came up with a concept of specialised environmental tribunal and adequate institutional capacity with a body of jurisprudence, developing over several decades, not years. Third, from the Netherlands and USA, the persistent importance of rights based and administrative law litigation as of a complementary – rather than replacement – accountability checks-and-balances when legislation fails. Neither of these models can be simply imposed wholesale, on the situation in Pakistan as it

is at the federal level, which is resource constrained; each, however, identifies a specific structural weakness in the Pakistani regime as it stands, an analysis that follows below, in a reverse systematic approach.

7. Implementation Challenges in Pakistan's Climate Change Legal Regime

These five interlocking challenges of implementation are detected in this Part after considering the doctrinal and comparative analysis developed in the previous section.

7.1. Constitutional and Federal Fragmentation

The 18th Amendment devolution of environmental competence to the provinces is constitutionally sound, but there is a lack of coherent framework of federal and provincial laws, including the Pakistan Climate Change Act 2017 at the federal level and four separate provincial Environmental Protection Acts running side by side, and with no correspondingly strong institution for inter-provincial coordination. The dilemma over water, which crosses the provincial boundaries along the Indus Basin, is a stark example: internal incoherence caused by different adaptation measures taken by the provinces cannot be ruled out while the province strives to present a united front in climate negotiations and its NDCs.

7.2. Absent Enforcement, Penal, and Monitoring Provisions

Lack of provisions in the main body of the Pakistan Climate Change Act 2017 for implementation, enforcement and prosecution provisions have been most frequently cited as a deficiency in the institutional framework of the Act. The 2017 Act has no "carbon budget", does not require the federal or provincial government to report on their compliance annually, and lacks penalties for failure on the part of the federal or provincial government. The suggested remedy to the lack of the necessary enforcement, which is a matter of legislative comment, is through subordinate or delegated legislation, but delegated rules cannot be used to supply parliamentary powers that parliament has not given in the law itself.

7.3. Institutional Capacity and Coordination Deficits

The Pakistan Climate Change Authority (PCCA) as the technical arm of the Act 2017 has been delayed in operationalisation, undermanned and beset with unclear demarcation of functions from the existing Ministry of Climate Change and provincial agencies named Environmental Protection (EP), since 2017. Reports on the governance response of Pakistan after 2022 floods have taken such a step as proposal within the government to reject the existence of the federal Environmental Protection Agency, which if enforced will only exacerbate implementation gap that is laid bare by this article.

7.4. Chronic Underfunding and Climate Finance Dependency

It is noteworthy that according to Pakistan's own declared NDC 2021, 70% of the nation's emissions reduction target is dependent on foreign financing which hasn't arrived at a pace commensurate with the nationally declared target. According to the latest update of the United Nations Common Country Analysis 2024, Pakistan's annual mitigation and adaptation financing need is at USD 348 billion from 2023 till 2030, which is quite low domestic private financing interest, while the pledged finance from the international community has been tardy. The Climate Change Fund under the 2017 Act – which was also established to fund adaptation at scale – has also not been able to successfully mobilise resources at scale, as compared to the regular, proactive funding that adaptation planning under the Framework for Implementation 2014–2030 assumes.

7.5. Political Discontinuity and the Limits of Judicial Compliance Monitoring

Lastly, the bountiful climate governance in Pakistan has been faced with succession of changes in government, provincial administration and bureaucracy, with each one creating discontinuity in the move forward with regards to continuation of action for adaptation and mitigation over the estimated climate horizon of 2014-2030. It was measured sixty-six per cent completion success of priority actions by the Leghari Court itself, in implementing its compliance monitoring, during a little over seventeen months of active judiciary action and a figure that points towards the capacity of the judicial arm to speed up compliance action and the experience that active judicial actions, let alone in a reduced form, as a standing monitoring committee of judges, can achieve only a partial level of compliance, and not maintain the momentum.

7.6. Case Study: The 2022 Floods as a Test of the Regime

The preceding analysis is the most empirical test carried out in 2022 floods. The monsoon rainfall that brought the monsoon rains that caused the floods was exacerbated by anthropogenic climate change, and the country's National Disaster Management Act 2010 makes disaster management a primarily provincial budget item rather than having any dedicated funding for flood adaption at the national-level that had been envisaged in the National Climate Change Policy 2012. The total damages measured in USD 14.9 billion, equivalent to 4.8% of Pakistan's GDP in FY2022 and economic losses of USD 15.2 billion amounting to approximately 18,000 square kilometres of crop damage and destruction of more than 1.7 million housing units. For the analysis developed in this Part, the above implementation shortcomings, not any lack of formal law or policy, are directly responsible for the state losing such massive sums through flood losses, considering that it has a National Climate Change Policy dating back to 2012, an Implementation Framework to 2014, and a dedicated Climate Change Act to 2017.

8. Bridging the Gap: A Reform Agenda

To the very minimum, Parliament should amend the Pakistan Climate Change Act 2017 to provide a legally-binding and enforceable carbon budgets of the kind that exists in the UK, alongside compulsory reporting annually to Parliament and a statutory duty for the executive to respond to independent expert advice within a set timeframe, as the UK Climate Change Committee has between it and its executive.

Second, there should be an inter-governmental framework agreement between the federal government and provinces of the form provided for in the Council of Common Interests, but not fully implemented, which would integrate the four provincial Environmental Protection Acts into the federal Act, such that there are meaningful provincial inputs into the preparation of future Nationally Determined Contributions, thereby resolving the issue of coordination gap identified in Part 6.1 and Part 7.1.

Third, the Climate Change Fund under section 8 of the 2017 Act should be funded by a dedicated and permanent carbon tax, mandatory screening of public investment by Pakistan's Public Investment Manual reforms for climate risks and a proper system of providing international

climate finance, thereby decreasing our dependency on funds from humanitarian appeals after disasters.

Fourth, similarly to the model of National Green Tribunal in India that hears environmental claims linked to climate change, the provincial Environmental Tribunals as provided for in the 1997 Act, should be resourced, staffed with technically qualified members and expand the scope of claims lined to such cases, as such Tribunals should act as a specialised forum to complement the scope of proceedings under Article 184(3) and Article 199 of the constitution for public interest litigation rather than substitute.

Fifth, parliament should, in response to these innovations in the doctrine of climate justice and intergenerational justice by *Shehla Zia*, *Leghari* and *D.G. Khan Cement*, adopt intergenerational climate justice as an express constitutional and/or statutory principle for the future, and not one that is judge-made and thus exposed to changes in the composition of the bench.

9. Conclusion

The climate change regime in Pakistan is not lacking or unformalized. It is constitutionally grounded since *Shehla Zia v WAPDA* (1994), has a dedicated policy framework since 2012, a national climate law since 2017 and a jurisprudence that is mostly cited in the global climate law, including *Leghari* and *D.G. Khan Cement*. The embedded deficiency is not the lack of law, but its application: constitutional gaps that are not addressed (such as the 24 gaps left unfilled bequeathed by the Eighteenth Amendment), a lack of practical coordination of institutional spending to strengthen the law, under-resourced institutions, governments that do not invest in the law, and international promises that are rarely fulfilled. The underlying shortfall is not a shortage of laws, but failures to put laws into effect: constitutional gaps that are not addressed (for instance, the 24 gaps left unfilled bequeathed by the Eighteenth Amendment); under-resourced institutions; governments that do not invest in the enforcement of the law; and obligations on other countries that are not met, even after many years of repeated commitments. Experience of other countries is not a single prescription to be grafted onto Pakistan but there are specific, targeted correctives, binding carbon budgeting, rights-based mitigation duties, and capacitative tribunals of the United Kingdom, India and the United States that are specifically Pakistan-specific mitigations. Much of the question of how to bridge this divide between the PLCC and its implementation is not a

question of drawing up new legislation, it is a question of creating the institutional, financial and political framework to make this legislation which already exists, truly effective in Pakistan.

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