



Financing Climate Action

Enhancing Effectiveness and Transparency in
Pakistan's Climate Governance Frameworks

Message from Chairman

Transparency International Pakistan

It is with great pleasure that I present to you this comprehensive research report on Climate Governance Frameworks in Pakistan. As the Chairman of Transparency International Pakistan, I am proud to see the culmination of extensive research and analysis into a topic of critical importance for Pakistan.

Climate change presents unprecedented challenges that require concerted efforts at every level of governance. Despite setting clear climate change mitigation and adaptation targets, limited progress has been made in establishing a suitable and well-integrated climate finance regime in Pakistan that can allow effective access to financial resources. This report delves into the intricate fabric of climate governance in Pakistan, examining the existing frameworks, policies, and practices while also offering insightful recommendations for improvement.

As the report identifies the loopholes in climate governance in the country, it is noticed that the gaps in overall climate governance have created issues in raising climate finance. The report comprehensively assesses these loopholes and implementation gaps, with a focus on fostering inclusiveness, transparency, integrity, and effectiveness.

It is my sincere hope that this report serves as a guiding light for policymakers, practitioners, and advocates in our collective pursuit of a sustainable and resilient future.

Regards,

Justice (R) Zia Perwez
Chairman
Transparency International Pakistan

Message from Executive Director

Transparency International Pakistan

It is my privilege to introduce this seminal research report on Climate Governance Frameworks in Pakistan. This research is conducted under Transparency International Pakistan's "Strengthening Transparency; Integrity in Climate Governance" project being implemented with the generous support from Waverly Street Foundation under Transparency International's Climate Governance Integrity Program.

The primary objective of this assessment is to comprehensively review existing frameworks driving climate governance in Pakistan with an aim to identify areas of improvement and implementation gaps, specifically focusing on transparency, inclusiveness, and effectiveness of the country's response to climate change at the federal and provincial levels.

Due to the cross-cutting nature of climate governance, it is important that a whole-of-society approach is taken in policy design, and a whole-of-government approach taken into consideration for administration, with the legally mandated Climate Change institutions leading in both fronts. To improve climate governance in a long-lasting manner, the report recommends, it should be integrated into national development plans (such as the long-term plans prepared by the Planning Commission). This integration will gradually allow uptake of climate governance priorities within the whole public sector and align it with adaptation and mitigation goals set by the federal government.

There is also a need to align our climate governance frameworks with international best practices, as well as ensure better coordination, inclusive policy-making, and appropriate capacity enhancement at sub-national levels. This will allow the Government of Pakistan to both create an enabling environment for achieving its NDCs, as well as develop long-term resilience and reduce its vulnerability to the climate crisis through increased access to climate finance, which at the moment remain meagre compared to the needs of the country.

Pakistan's vulnerability to the climate crisis has been made apparent over the past two decades, with the country suffering significant human and financial losses due to climate induced disasters. Our ability to build resilience depends on the effectiveness of the country's climate governance framework as well as raising appropriate climate financing. In doing so this report provides some key takeaways that can guide improvements in climate governance integrity and catalyze country's efforts to develop climate resilience and address climate effects.

I also extend my heartfelt appreciation to the dedicated team behind this research and hope that the Federal and Provincial Governments, International Development Partners and Civil Society Stakeholders will take key lessons provided in the report to help guide Pakistan be better prepared in the decades to come.

Regards,

Kashif Ali
Executive Director
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These institutions include Ministry of Climate Change and Environmental Coordination, Provincial Climate Department, Ministry of Planning Development & Special Initiatives, Provincial P&DD Departments, National Disaster Management Authority (NDMA), Provincial and District Disaster Management Authorities (PDMAs & DDMA), Federal Board of Revenue (FBR), Auditor General of Pakistan (AGP), Green Climate Fund (GCF), International Monetary Fund (IMF), World Bank (WB), Asia Development Bank (ADB), Ministry of Finance (MoF), National Accountability Bureau (NAB), National Finance Commission (NFC), Pakistan Environmental Protection Agency (EPA), United Nations Framework Convention on Climate Change (UNFCCC), United National Development Program (UNDP), Climate Finance Pakistan (CFP), and others. Any omissions in this brief acknowledgement do not mean lack of gratitude.



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Transparency International Pakistan (TI Pakistan) is the National chapter of Transparency International, established in 2002 with the main aim to strengthen the global value system by making transparency and accountability more relevant public norms. Working in collaboration with other stakeholders and departments, TI Pakistan regularly publishes research papers, reform proposals, and manuals with the aim of disseminating information to all stakeholders, and also conducts capacity building workshops.

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Message from CEO

Climate Finance Pakistan

Dear Esteemed Members,

I am honored to present this comprehensive report, commissioned by Transparency International Pakistan, addressing the critical aspects of climate governance in our country. As a leading policy consultancy and venture building studio dedicated to advancing green technology, Climate Finance Pakistan has a vested interest in uplifting our country's climate governance landscape.

This report stands as a testament to our shared commitment to transparency, accountability, and effective governance. I would like to express my deep gratitude to Dawar Hameed, our lead researcher for this report, whose insights have been invaluable in shaping the narrative. Special thanks to Shajeea Khalid for her logistical and research support. Our collaboration with Transparency International Pakistan aligns seamlessly with our mission at CFP – to accelerate investments in green tech projects and foster a climate resilient future for Pakistan.

There is a crucial link between smooth governance and the deployment of climate finance. Insights from our work show the need for Pakistan to enhance and showcase its domestic capacity for climate finance, establishing moral legitimacy to seek international co-financing. It is essential for us to focus on the bankability of our nation, emphasizing the existing leadership in domestic climate finance. The \$40 billion in damages suffered by Pakistan during 2022's floods can be reframed as an investment made by the local population, comprising an emerging market of 240 million Pakistani consumers. This perspective places our climate finance strategies at a position of strength. This perspective can only be furthered with strong governance strategies.

The organic trends in our economy are a beacon for those who are willing to look the right way. The Pakistani solar energy market is expected to record a compound annual growth rate (CAGR) of more than 2.5% during the forecast period of 2022-2027, with the installed capacity rising from 46 MW in 2012 to 737 MW in 2020. In the electric vehicles sector, 40% of a USD 10 billion motorbike market is expected to convert to EVs, showcasing significant investment by households and domestic consumers in climate-focused adaptation and mitigation initiatives. This trend highlights our potential to dollarize climate adaptive and mitigative projects, provided climate governance is improved. The pipeline from project inception to financing to execution needs to be both smoothed and widened.

We remain committed to working collaboratively with our stakeholders to facilitate the implementation of the recommendations outlined in this report. We look forward to a future where our collective efforts lead to a greener, cleaner, and more sustainable Pakistan.

Sincerely,

Mekaeel Malik
Founder,
Climate Finance Pakistan

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LIST OF ACRONYMS

ACE	Anti-Corruption Establishment
ADP	Annual Development Program
AGP	Auditor General of Pakistan
BCC	Budget Call Circular
BSP	Budget Strategy Paper
CBA	Climate/Cost Benefit Analysis
CBT	Climate Budget Tagging
CCA	Climate Change Authority
CCD	Climate Change Division
CDM	Clean Development Mechanism
CGA	Controller General of Accounts
COP	Conference of Parties
DDMA	District Disaster Management Authority
E&CC	Environment & Climate Change
FBR	Federal Board of Revenue
G77	Group of 77 countries
GCF	Green Climate Fund
GHGs	Green House Gases
IDA	International Development Assistance
IMF	International Monetary Fund
L&D	Loss & Damage
MDBs	Multilateral Development Banks
MoCCEC	Ministry of Climate Change & Environmental Coordination
MoF	Ministry of Finance
MTBF	Medium Term Budgetary Framework
MTEF	Medium Term Expenditure Framework
NAB	National Accountability Bureau
NAMAs	Nationally Appropriate Mitigation Actions
NCCP	National Climate Change Policy
NCFS	National Climate Finance Strategy
NDCs	Nationally Determined Contributions
NDMA	National Disaster Management Authority
NDMC	National Disaster Management Commission
NFC	National Finance Commission
OECD	Organization for Economic Cooperation & Development
PC	Planning Commission
PC-I/II	Planning Commission forms
PDMA	Provincial Disaster Management Authority
P&DDs	Planning & Development Departments (Provincial)
PEPA	Pakistan Environment Protection Act
PFM	Public Financial Management
PDSP	Public Sector Development Program
SFB	Sustainable Finance Bureau
SIFC	Special Investment Facilitation Council
UNFCCC	United Nations Framework Convention on Climate Change

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EXECUTIVE SUMMARY

Climate Governance in Pakistan has come under the microscope both locally and internationally due to growing concerns about the country's resilience against climate and environmental risks. In the aftermath of the floods of 2022, these concerns have become more acute. The government's efforts to catalyze much needed climate finance inflows have not borne fruit, and pledges of support by bilateral and multilateral partners have not translated into reality. It has been partly diagnosed that the reluctance of finance providers and the government's inability to access it is due to major gaps in its climate governance system.

Transparency International Pakistan's analysis of Climate finance inflows found that Pakistan has cumulatively received US\$1.4-2.0 billion only, per year, over the last ten years. Much of this has been in the form of donor managed loans. This also suggests that concerns regarding integrity in climate governance will remain at the forefront.

The current analysis further comprehensively looks at the frameworks driving climate governance in Pakistan, and has found that the current system needs significant improvement, due to incomplete implementation, deep influence of non-climate sector institutions, arbitrary decision-making without strong political commitment, and lack of public participation in policy-making. These factors could potentially compromise the integrity, and the government must resolve them in order to accelerate climate finance inflows.

Several suggestions are presented, based on the above diagnosis, which can help the Federal and Provincial governments improve climate governance overall, and integrity of the system in particular.

Recommendations

- It is important to recognize that conventional forms of planning and budgeting are not fully suited to the needs of climate governance, and appropriate measures and reforms are necessary to invigorate climate finance and improve integrity of the system.
- Climate Change institutions as set under the Climate Change Act need to be operationalized and empowered, and be the primary drivers of integrating climate in governance, both horizontally and vertical, across the federal and provincial governments.



- An appropriate set of tools for climate analysis and a framework for performance review must be adopted, to imbibe transparency into the system. This includes evidence generation, climate budget reports, public dissemination, and stakeholder consultations. Further, a uniform approach to reporting must be established to report climate spending, in order to encourage comparability, reward better performance, and create a learning feedback loop for the future.
- In order to guide transformations to the existing system, the government can set benchmarks and take inspiration from peer states, which are experimenting with approaches for improving climate governance integrity, including standardized checklists for project design and approval, climate impact assessments, new results-based monitoring & evaluation, and legally mandated green budgetary reporting.
- Improving integrity also requires capacity building of key auditing and reporting institutions, as well as of corruption watchdogs. Similarly, the Public Accounts Committee, which reviews audit reports, needs to have an understanding of climate benefits.

Applying these enhancements can help Pakistan build resilience to climate change, as well as provide access to more financial resources for the cash-strapped government. Without improving integrity and governance practices, it can be expected that climate risks will persist or even increase further.



INTRODUCTION

The current climate finance regime in Pakistan does not derive from a single policy framework, but is an amalgamation of various minor amendments to the PFM.

Pakistan has been actively seeking to raise Climate Finance, especially in the aftermath of the 2022 floods and increased macroeconomic pressures. Since 2017, the National Determining Contributions (NDCs) have argued that Pakistan is amongst the top 10 most vulnerable countries to be affected by climate change, despite contributing only 0.8 percent to global emissions.

The country experiences an average annual loss of US\$4 billion due to a high vulnerability to climate change-induced events, such as, droughts, floods, and glacier melting, primarily caused by the rise in global emissions from the highly industrialized world. Pakistan's contributions to international climate diplomacy are unique; it chaired the G77+China group of countries when the United Nations Framework Convention on Climate Change (UNFCCC) was agreed on in 1992¹, and incidentally was the chair in 2022² when the Loss & Damage Fund was finally approved. However, at home, climate governance has not received similar leadership and attention, creating gaps and limiting access to climate finance sources.

According to independent experts on climate change, Pakistan's NDCs post-2016 have been less ambitious and more achievable. In 2021, Pakistan set a conditional target of achieving an overall 50% reduction in emissions, with 15% from national contributions and 35% from international financial support³. This is contingent on a slow growth rate of 3%, in contrast to the previous government's ambitious claim of a 300% reduction in emissions with a more ambitious 9% economic growth rate.

The high-priority actions detailed in the NDC include 60% mitigation actions, focusing on progress in low-carbon development, carbon sequestration, and the adoption of renewable energy⁴. The adaptation actions concentrate on ecosystem-based approaches, a nature-based solutions approach to Green Jobs, climate-resilient agriculture, and water management.

Despite setting clear climate change mitigation and adaptation targets, limited progress has been made in establishing a suitable and well-integrated climate finance regime in Pakistan that can allow effective access to financial resources. The climate finance flows into the country are meagre compared to the needs of the country, and the limited funding received is largely in the form of International Development Assistance (IDA) or debt-financed projects.

Current climate finance regime in Pakistan does not derive from a single policy framework, but is an amalgamation of various minor amendments within the Federal Government's Public Finance Management (PFM) system, guided by relevant ministries and allied offices. Leading roles are held by the Ministry of Finance (MoF), the Planning Commission (PC), and the Ministry of Climate Change & Environmental Coordination (MoCCEC).

The gaps in overall climate governance have also created issues in raising climate finance. Firstly, as mentioned earlier, it acts as a roadblock for the government to access finance for its various adaptation and mitigation targets. Secondly, it acts as a disincentive for funding institutions and

donors who prefer structured and transparent mechanisms to ensure finance utilization takes place in an effective and accountable manner.

Hence, ensuring integrity in climate governance can help the Government of Pakistan to both create an enabling environment for achieving its NDCs, as well as develop long-term resilience and reduce its vulnerability to the climate crisis.

This report aims to review and address issues around Climate Governance Integrity in Pakistan, with a special focus on the country's PFM and project planning approaches, as well as monitoring and accountability regimes.

The report is structured to cover the following:

- Review of Pakistan's Climate Governance Framework
- Review of Climate Finance, and assessment of funding inflows
- Overview of major projects and Federal Budget allocations

- Discussion of planning and budgeting practices, and relevance of PFM
- Present global best practices and climate governance regimes
- Screening and scoring for climate responsible planning and budgeting
- Interventions for bridging gaps for enhancing governance integrity

Finally, this report contributes to the existing body of research conducted by Transparency International on the governance integrity of climate and environment initiatives. Its purpose is to support organizations, policymakers, international financial institutions and civil society in ensuring corruption-free inflows and transparent management of climate finance.

Climate Change Governance in Pakistan

Pakistan's Climate Change policies go back to only a decade. Due to the nascency of the emergence of 'climate change' as a public policy matter, the country is still in the process of effectively dealing with various facets of the climate crisis.

Prior to the 18th Amendment to the constitution of Pakistan in 2010, the administration of Environment Protection and Climate relevant laws was highly centralized⁵. The country's judiciary, however, has been active since at least two decades prior in defining rights linked to environmental and climate justice.

An analysis of case law linked to the interpretations of 'fundamental rights' made by courts shows that 'right to life' under the constitution of Pakistan binds national and provincial governments to safeguard many economic, social and cultural rights.⁶ In the landmark case of Shehla Zia vs. WAPDA (1994), life was defined as "covering all aspects of human existence" and not merely the state of being alive or dead.⁷ The bench led by Chief Justice of Pakistan ruled, "Life includes all such amenities and facilities which a person born in a free country is entitled to enjoy with dignity, legally and constitutionally; the word "life" in the Constitution has not been issued in a limited manner."⁸

This decision eventually led to the passage of the Pakistan Environmental Protection Act (PEPA) in 1997, which established the Pak-EPA and provincial EPAs, laying the basis of future environmental and climate governance in the country.

Climate Governance Framework

Federation Led System

At the government level, in 2011, the Ministry of Climate Change was established, and Climate Change was soon upgraded to a 'Division' of the federal government. The Ministry has recently been renamed, in 2023, to Ministry of Climate Change & Environmental Coordination (MoCCEC).

The Climate Change Division (CCD) primarily deals with national level programmes and Pakistan's international commitments. Provinces created Environment Protection Departments after devolution shifted the jurisdiction of the subject to their legislative ambit. In recent years, these provincial departments have also been renamed as Environment Protection & Climate Change Department. In the case of Sindh province, the department also oversees Coastal development, while in the case of Khyber Pakhtunkhwa the department includes Forestry management.

Two decades after PEPA 1997, in 2017, the Climate Change Act was passed, creating a legislative backing for the established climate governance institutional arrangement. The Act further mandates the establishment of the Climate Change Authority, to be headed by a distinguished professional or technocrat appointed by the Prime Minister, while Members must also be hired to lead Adaptation, Mitigation, and Coordination, along with representatives of the Provinces. However, till date the Climate Change Authority has not been operationalized.

According to the Pakistan Climate Change Act, 2017, the authority is tasked with responsibility of developing appropriate projects to secure international climate funding, and ensuring adherence to obligations detailed in international conventions, treaties, and agreements. These obligations encompass fulfilling both national-level commitments towards global climate change mitigation and adaptation targets, as well as international duties towards Pakistan, which include the provision of climate finance.

In addition to the imperative need for Pakistan to actively seek climate finance, there's also a need to address deficiencies in its domestic climate change framework. One major concern revolves around bureaucratic obstacles. For the Climate Change Authority to effectively execute its various functions as outlined in Section 8(1) of the Act, extensive engagement with international entities is inevitable. However, Section 10(2)(b) limits the authority's power to form agreements or partnerships with foreign governments and organizations. The said section states: "The authority shall have [the] power to enter into contracts or establish partnerships or associate with entities and organizations as it may consider appropriate to support its functions, provided that agreement with foreign governments and organizations shall be entered into only with approval [from] the government".

Section 10(2)(b), in conjunction with Section 12(2) which establishes the Pakistan Climate Change Fund, mandates that all funds granted by any entity be deposited into the fund. An analysis published in the LUMS Law Journal titled 'Examining the Pakistan Climate Change Act 2017 in the Context of the Contemporary International Legal Regime' highlights that a significant portion of the funding for developmental projects is foreign, underscoring issues with bureaucratic impediments⁹.

Furthermore, transparency is crucial. The immunity granted to the authority under Section 14 of the Act, shielding it from legal proceedings for decisions made in 'good faith',

should be revoked. Amendments to the Act should introduce an appellate tribunal composed of independent climate change experts. This tribunal would serve as the primary avenue for appeals against the authority's actions or inactions. Appeals against the tribunal's decisions can then be made directly to the High Courts.

There is also a need to streamline the Ministry of Climate Change, its affiliated departments, and the authority itself. The Act's operations should be seamless, and those responsible for executing its functions should be efficient and effective. The authority should undertake its tasks independently

Jurisdiction	Legislative Framework	Year
Federal	Pakistan Environmental Protection Act ¹⁰	1997
Federal	Climate Change Act ¹¹	2017
Punjab	Punjab Environmental Protection Act ¹²	2012
Khyber Pakhtunkhwa	KP Environmental Protection Act ¹³	2014
Sindh	Sindh Environmental Protection Act ¹⁴	2014
Baluchistan	Baluchistan Environmental Protection Act ¹⁵	2012

Table 1: Climate Governance Legislation Across Pakistan

Separately, the Act also established the Climate Change Council, an apex policy-making body under the office of the Prime Minister and with representation from major Federal Government divisions, the Provincial governments, and Chairpersons of the National Disaster Management Authority and Climate Change Authority. Climate experts and similar professionals can also be notified as members. The Council, however, has only been constituted twice and rarely called to meet by Prime Ministers over various governments.

The country’s first National Climate Change Policy (NCCP) was produced in 2012, which was revised after a gap of nine years in 2021. The policy is also accompanied by the ‘Framework for Implementation (2014-2030)’ published in 2013, which details an implementation schedule for Adaptation and Mitigation actions that have been prioritized by the Federal Government. Provincial governments have also now drafted or approved Provincial Climate Change Policies, which was required under the NCCP. Provinces have also made ‘Climate Change Action Plans’, which are their equivalent to the implementation framework.

Jurisdiction	Policy Framework	Year
Federal	National Climate Change Policy	2012 ¹⁷ & 2021 ¹⁸
	Framework of Implementation of CC Policy ¹⁹	2013
	National Adaptation Plan ²⁰	2023
Punjab	(Draft) Punjab Climate Change Policy ²¹	2017
	(Draft) Provincial Climate Action Plan ²²	2021
Gilgit-Baltistan	GB Climate Change Strategy & Action Plan ²³	2017
Azad Jammu & Kashmir	AJ&K Climate Change Policy ²⁴	2017
Khyber Pakhtunkhwa	KP Climate Change Policy ²⁵	2022
	KP Climate Change Action Plan ²⁶	2022
Sindh	Sindh Climate Change Policy ²⁷	2022
Baluchistan	(Draft) Baluchistan Climate Change Policy	Under development

Table 2: Climate Policy Framework Documents Across Pakistan

Separately, as a signatory to the United Nations Framework Convention on Climate Change (UNFCCC), Pakistan has also set out its adaptation and mitigation objectives following the “common but differentiated responsibilities” (CBDR) principle. Pakistan submitted its mitigation commitments under the Nationally Appropriate Mitigation Actions (NAMAs)¹⁶ in 2010. It has also submitted its Nationally Determined Contributions (NDCs) commitments, after the Paris Climate Accords, first in 2016, and then updated NDCs in 2021. While these commitments are not policies in themselves, the overall national climate policy landscape is designed aiming to achieve them.

The National Adaptation Plan was also approved by the Federal Cabinet last year (2023), and similarly requires sub-national plans to be developed and implemented. Understanding the NCCP and Provincial policies is important to understand the priorities of policymakers concerning various climate challenges faced. Due to a variety of climatic zones or ‘agro-ecological’ zones, across the jurisdiction of Federal and Provincial governments, the NCCP and the Provincial policies, respectively, have noticeable differences in recognition of challenges, stated policies and prioritization of actions.

The Unique Role of Disaster Management Authorities

Besides the Climate Change Division, a rather anomalous feature in Pakistan’s climate governance is the large role played by the National Disaster Management Authority (NDMA). NDMA was established in 2007 through an ordinance, and has been a Military-led initiative since its inception. The organization came about as a consequence of the deadly 2005 earthquake that hit the country’s northern parts. Before 2005, an Emergency Relief Cell operating under the Federal Cabinet division held the role of disaster or calamity response.

In December 2010, the National Disaster Management Act²⁸ was passed, after the

'Super floods' of 2010 provided a fresh impetus of broadening disaster risk management – inclusive of climate disasters within a wider multi-hazard risk management approach. The Act also established the National Disaster Management Commission (NDMC), which is presided over by the Prime Minister and has wide representation including the Leaders of Opposition from the National Assembly and Senate, all Provinces, major Federal Ministries, and the Armed Forces. Members can also be co-opted from the Civil Society. It is the commission's responsibility to deliberate and develop the National Plan and National Disaster Response Framework, as well as update these based on emerging evidence and practices. Further, the Armed Forces play an important role and provide input, since historically disaster response has been led by a regional Army Corps, assisted by the local administration. The NDMA has been mostly chaired by a serving Army General since its inception.

Because of multiple major climate-induced disasters in the past two decades, the NDMA

has come to play a crucial role in the administration of climate policies. Since devolution, Provincial Disaster Management Authorities (PDMAs) and District Disaster Management Authorities (DDMAs) have also been established. While on paper, the NDMC is a forum with wide representation, much like the Climate Change Council, it has rarely met regularly, for purposes of improving and developing new plans or policies.

At the District level, the local participation in climate planning is limited, and DDMAs are run by District Commissioners, as Local Governments remain absent in many parts of the country. Therefore, the DDMAs, though the first-responders and primary information collectors, are often constrained by the same issues as the respective district administration, in terms of human, financial and logistical resources.

In summary, while Climate Change as a subject is now overseen by relevant Ministries and departments, the Disaster Management Authorities still function alongside, and in



some cases hold more experience as these offices existed prior and hold significantly more institutional memory. In essence, grey areas in the ambit of climate change governance have resulted in misaligned resource allocations, institutional dependencies, duplication of work, and opaque decision-making.

Provincial Climate Governance Policies & Implementation Plans

At the Provincial level, climate policy-making has picked up in recent years. This is due to a combination of factors, but primarily due to a gradual diffusion of learnings from the federal to provincial levels, as well as a recognition of localized challenges.

In Punjab, a draft policy (2017) and action plan (2021) was made, however, after a lapse of several years it remains unapproved. Today, it may be considered outdated as new evidence and relevant information has consistently increased. In the draft, the policy focuses on impacts such as floods and droughts, while aiming to “ensure water, food and energy security”. The policy also aims to integrate climate compatible development, and use climate finance and technology transfer to achieve this. Punjab is also attempting to devise a climate finance framework, but without an approved overarching policy, its plans may be difficult to achieve.

The Punjab Climate Change Policy 2017 (Draft) emphasizes on inclusivity and intends to enhance awareness of the impacts of climate change among all stakeholders, and ensure interests of vulnerable groups and gender aspects are adequately addressed in climate development strategies and planning.

The Punjab government also aims to develop training and skill development programs, especially for women, ensure just and equitable access to health insurance, especially for the poor, and strengthen community participation in vulnerability assessment studies and management plans to provide useful climate-poverty information.

In Khyber Pakhtunkhwa, the climate change policy was approved in 2022, which puts similar emphasis on improved “water, food and energy resource planning”. KP has higher risks due to mountainous and valley regions, hence, there is an additional focus on these communities. KP also holds the highest percentage of forest cover among the provinces, and therefore, the policy lays great importance to nature conservation and nature-based solutions. The climate change action plan was also developed alongside and offers possible adaptation and mitigation solutions based on the policy goals. While both documents cover many of the basics, there has been very limited movement towards implementation.

The Khyber Pakhtunkhwa Climate Change Policy 2022 aims to address the concerns of vulnerable, marginalized and indigenous communities in climate strategies and planning, plan opportunities for gender roles to mitigate the negative effects of climate change, and develop gender-sensitive indicators related to adaptation to evaluate and monitor vulnerability of women to climate impacts and to address it accordingly.

The policy seeks to involve youth in the decision-making through formulation of adaptation & mitigation strategies at local and provincial level, promote opportunities for youth groups to engage in and benefit from KP’s adaptation and mitigation initiatives and establish Community Based Organizations (CBOs) consisting young volunteers focusing on Climate Change adaptation practices.

In Sindh, the climate change policy was approved in 2022, but an action plan has not been made. The policy is tailored to its arid climatic needs, and emphasis is laid on improving sustainability. Coastal issues, such as mangroves, fisheries and seawater intrusion are also highlighted, while episodes of extreme heat are also unique to the province. Sindh is also unique in the context that it already has an active Carbon credit project



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(Sindh Delta Blue Carbon), but it started well before, in 2016, without a provincial climate change policy or climate finance framework.

In terms of inclusivity, Sindh Climate Change Policy 2022 targets women as they are at higher risk of climate change impacts due to existing gender inequalities and societal structure. Under the provincial climate change policy, the government of Sindh aims to work on gender sensitive interventions to incorporate the role of women in community organizations. Increasing women's ability to access valuable resources, empowering them for decision-making and providing adequate information about climate change and coping strategies is part of the policy.

The policy prioritizes human health with specific reference to vulnerable segments of the society, such as ensuring availability of medication and clean drinking water during climatic extremes and emergencies, and seeks to strengthen community-based disaster

preparedness and mitigation programs to build a climate resilient society. For the communities in coastal areas, the policy highlights the need to construct structural barriers for the protection against the rising sea level to reduce their vulnerability. The policy also targets the youth climate education as an important tool to combat the destructive effects due to climate change.

Work has also been done on other sub-national policies, but compared to the national policy and framework, all these are relatively new, and hence practically not implemented. The policies provide limited guidelines on climate governance and finance, and largely describe major climate issues relevant to the jurisdictions. Therefore, in the current form, the climate governance frameworks in the country are severely lacking, and require a variety of improvements. The overall integrity of Pakistan's climate governance remains unsatisfactory, particularly on matters pertaining to climate planning, climate finance, institutional empowerment, vertical and

horizontal coordination, and representation from local communities and climate experts.

Suggested Improvements

In the face of escalating climate risks, Pakistan needs to align its climate governance framework with international best practices, as well as ensure better coordination, inclusive policy-making, and appropriate capacity enhancement at sub-national levels. A large number of countries now have some climate strategies or policies, and most have some climate change legislation in place.

While Pakistan has made similar strides in terms of developing policies, it is apparent that many of the proposals within legislation and governance framework have never been implemented. For example, the Climate Change Authority remains non-existent. Other gaps, as highlighted earlier, originate in the incomplete or selective application, such as limited use of inclusive policy-making forums like the Climate Change Council. By not empowering the climate change institutions completely, as set out in the law, a dependency remains on other institutions and offices, which are not rightly suited or structured to administer the sensitive subject of climate change.

Further, due to the cross-cutting nature of climate governance, it is important that a whole-of-society approach is taken in policy design, and a whole-of-government approach taken into consideration for administration, with legally mandated Climate Change institutions leading in both fronts. Many public sector policies also have a direct or indirect climate impact, where climate relevant expertise must be included. This can be suitably done if an operationalised Climate Change Authority exists and fulfils its functions such as aligning policies or offering assistance during their design phase. It could further act as the lead agency for developing climate governance related taxonomy and nomenclature, which should ideally be uniform throughout the country, in order to improve

climate reporting and review. The Climate Change Authority should also be aligned with the Climate Change Council, to make governance more participatory.

Climate governance has not been effectively prioritized in development plans, and hence, other sectors such as energy, agriculture, industry, water, etc., continue to favor traditional development schemes with limited consideration for climate resilience. To improve climate governance in a long-lasting manner it should be integrated into national development plans (such as the long-term plans prepared by the Planning Commission). This integration will gradually allow uptake of climate governance priorities within the whole public sector and align it with adaptation and mitigation goals.

Lastly, there appears to be a large lag between National and Provincial policy-making. In some cases (Punjab and Baluchistan), policies have still not been approved, nor the implementation action plans, without which sectoral adaptation and mitigation is not possible. The Federal Government should establish protocols and provide support for quick policy-making, as limited capacity in provincial departments might be hindering these developments.

Climate Finance in Pakistan

Climate finance has become an integral part of government budgets across the globe. Pakistan is a signatory of the Paris Agreement, and accordingly submits its National Determining Contributions (NDCs) since 2017. The country underscores that Pakistan is in the top 10 most vulnerable countries affected by climate change, while it contributes less than 1 percent in global emissions.²⁹

These low-emissions, notwithstanding, it continues to suffer losses in billions of dollars annually, in the shape of climate change-induced hazard events, which take a heavy toll on public health, infrastructure, human and economic development, food security, and clean water availability. The government of Pakistan states that Developed countries (Annex I under the Paris Agreement) have to help it bear the burdens and provide assistance to build resilience, through provision of adequate climate finance. Much of this desired assistance has not been as forthcoming due to a variety of reasons.

In November 2023, a National Climate Finance Strategy (NCFS)³⁰ was launched by the newly created Sustainable Finance Bureau (SFB), that states 20 percent of Public Sector Development Plan (PSDP) should be climate-oriented. The Planning Commission also committed to a Green Growth Framework, as advised by the Special Investment Facilitation Council (SIFC) – a high-level policy body that has representation of the Federal Cabinet and Armed Forces. But these measures lack strong political commitment, do not effectively address climate governance integrity concerns, and are creating parallel streams of climate governance, which may further regress

climate finance instead of accelerating it.

To manage climate finance, governments use existing Public Financial Management (PFM) systems to incorporate climate-related planning and budgetary spending, and therefore, climate finance performance becomes linked with the PFM regime. This also means that climate finance is equally exposed to any intrinsic weaknesses or gaps in the system. Understanding the structure of Pakistan's PFM is important, in this context, to delineate areas of interest and for interventions that can improve climate finance performance and integrity.

Assessment of International Support for Pakistan

Pakistan has made its NDC commitments contingent upon receiving adequate finance. Given climate finance inflows are very low, these commitments cannot be implemented without international support. Analysis of OECD data (2017) by Carbon Brief suggests that Pakistan received about US\$491 million in climate finance – about half from bilateral and half from multilateral sources, which is considered insignificant given the scale of the investments required to offset losses and implement NDC.³¹ Another major finding was that while Pakistan has consistently ranked among the top ten countries most impacted by climate change, it did not feature among the top ten recipients of climate finance. Bilateral partners have been providing grants or aid, while Multilateral partners (particularly Multilateral Development Banks) provide assistance in the form of debt. In both cases,

however, actual climate component within the wider programme is a proportion of the total, hence, such analyses also do not accurately provide the actual amounts directed to adaptation and mitigation goals. Furthermore, some grants directed to disaster response, which in effect do not contribute to NDCs.

The benchmark of wealthy nations collectively

investing US\$100 billion per year in Non-Annex countries has only been achieved once, which was the past financial year (2022-23), and a mechanism to enforce this commitment has still not been created. The WRI (World Resources Institute) reports that inflows remain uneven and below par. The biggest polluters such as the United States have fallen short from their share by around 40 percent,

Table 3 Estimated Climate Finance grant inflows into Pakistan based on OECD (2017) analysis

Climate Finance Grants to Pakistan from Bilateral Sources			
Donor	Funding (US\$)	Sector	Project type
Australia	\$2,230,000	Emergency food aid	Adaptation
	\$1,342,000	Basic drinking water supply and basic sanitation	Adaptation
	\$1,301,000	Water sector policy and administrative management	Both
	\$4,000	Education and training in water supply and sanitation	Adaptation
	\$3,000	Trade education/training	Adaptation
Germany	\$8,294,000	Multisector aid	Adaptation
	\$7,741,000	Energy generation, renewable sources - multiple technologies	Mitigation
	\$6,635,000	Energy research	Adaptation
	\$885,000	Energy generation, renewable sources - multiple technologies	Mitigation
	\$807,000	Food crop production	Adaptation
	\$540,000	Disaster prevention and preparedness	Adaptation
	\$442,000	Agricultural development	Adaptation
	\$153,000	Basic drinking water supply and basic sanitation	Adaptation
	\$31,000	Disaster prevention and preparedness	Adaptation
	\$15,000	Environmental policy and administrative management	Adaptation
	\$12,000	Energy policy and administrative management	Adaptation
Ireland	\$267,000	Agricultural development	Both
	\$136,000	Agricultural development	Both
	\$87,000	Democratic participation and civil society	Both
	\$31,000	Democratic participation and civil society	Mitigation
Italy	\$91,000	Public finance management	Both
	\$31,000	Water sector policy and administrative management	Both
	\$2,000	Public finance management	Both
Japan	\$45,955,000	Energy policy and administrative management	Mitigation
	\$1,743,000	Sanitation - large systems	Mitigation
	\$558,000	Waste management/disposal	Mitigation
	\$337,000	Energy policy and administrative management	Mitigation
	\$201,000	Energy policy and administrative management	Mitigation
	\$48,000	Disaster prevention and preparedness	Adaptation
	\$24,000	Energy policy and administrative management	Mitigation
	\$21,000	Energy policy and administrative management	Mitigation
	\$12,000	Energy policy and administrative management	Mitigation
	\$8,000	Energy policy and administrative management	Mitigation
\$6,000	Environmental policy and administrative management	Adaptation	

Donor	Funding (US\$)	Sector	Project type
Korea	\$51,000	Agricultural development	Adaptation
	\$36,000	Agricultural development	Mitigation
	\$17,000	Public sector policy and administrative management	Adaptation
	\$15,000	Waste management/disposal	Adaptation
		Water supply - large systems	Adaptation
	\$11,000	Health policy and administrative management	Adaptation
	\$7,000	Agricultural development	Mitigation
Agricultural education/training		Adaptation	
Norway	\$421,000	Solar energy	Mitigation
Spain	\$166,000	Disaster prevention and preparedness	Adaptation
Sweden	\$543,000	Democratic participation and civil society	Adaptation
	\$181,000	Democratic participation and civil society	Adaptation
Switzerland	\$3,045,000	Disaster prevention and preparedness	Adaptation
	\$2,030,000	Disaster prevention and preparedness	Adaptation
United Kingdom	\$8,097,000	Social/welfare services	Mitigation
	\$6,963,000	Environmental policy and administrative management	Adaptation
	\$3,794,000	Primary education	Adaptation
	\$2,834,000	Primary education	Both
	\$2,513,000	Environmental policy and administrative management	Adaptation
	\$2,429,000	Road transport	Mitigation
	\$1,159,000	Primary education	Adaptation
	\$1,034,000	Environmental policy and administrative management	Adaptation
	\$1,000,000	Secondary education	Both
	\$900,000	Environmental policy and administrative management	Adaptation
	\$860,000	Environmental policy and administrative management	Adaptation
	\$810,000	Sectors not specified	Adaptation
	\$756,000	Environmental policy and administrative management	Adaptation
	\$522,000	Domestic revenue mobilisation	Mitigation
	\$352,000	Sectors not specified	Adaptation
	\$336,000	Social/welfare services	Adaptation
	\$150,000	Research/scientific institutions	Adaptation
	\$47,000	Road transport	Mitigation
United States	\$9,800,000	Agricultural development	Both
	\$1,050,000	SME development	Both
	\$600,000	Agricultural policy and administrative management	Both
	\$286,000	Multisector aid	Both
	\$176,000	Energy policy and administrative management	Both
	\$12,000	Solar energy	Mitigation

while other states have also not reached their commitments to the full. The COP28 summit saw the landmark agreement on Loss & Damage fund, but it received pledges worth only \$700 million, which is 0.2 percent of the estimated funding needed.³²

Another noticeable issue, especially in the case of Pakistan, is that assistance coming through Multilateral Development Banks

(MDBs) and State-supported development organizations has been provided in the form of development assistance loans or require the host country to fund in-part to become eligible. These forms of financing act as restrictions for countries such as Pakistan from accessing these resources. Separately, another issue is the skewed prioritization for financing mitigation over adaptation. The OECD report 'Climate Finance Provided and

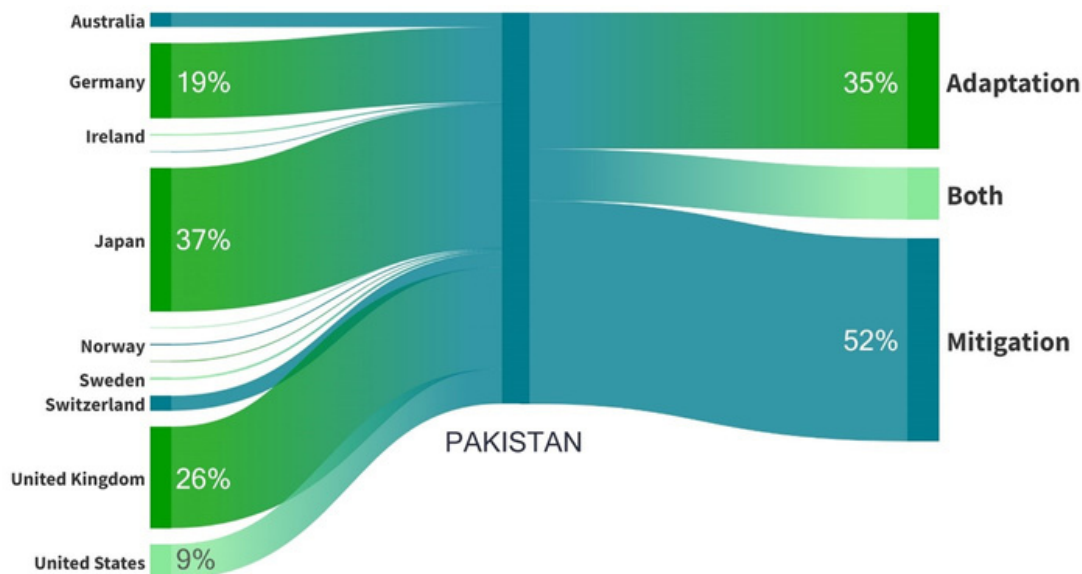


Figure 1 Bilateral Climate Finance Grant Inflows Into Adaptation & Mitigation (or Both) Streams

Mobilized by Developing Countries’ (2021) reports that about twice more money went into mitigation, in stark contrast to the widespread recognition throughout COP meetings of adaptation as crucial for all climate action for reduction in vulnerability and increase in adaptive capacity of the targeted communities.

Currently, some major MDB-supported projects or programs are being implemented through International Development Assistance (IDA) loans worth \$2-3 billion, with varying range of achievement. Another estimate suggests that total climate relevant IDA in Pakistan by all MDBs in 2015-2020 was \$6 billion.³³ The above non-exhaustive list (table 4) is meant to showcase the types of projects being implemented. In Sindh, for example, at least 3 programs worth \$1.3 billion are being implemented for rehabilitation and resilience-building after the 2022 floods; these include ‘Sindh Flood Emergency Rehabilitation Project’, ‘Sindh Flood Emergency Housing Reconstruction Project’, and ‘Sindh Water and Agriculture Transformation Project’. Similarly, in Punjab, the \$200 million ‘Punjab Green Development Program’ is being implemented as an IDA loan. However, the latter had also been reported to be underperforming.³⁴ Similarly, another climate relevant program worth \$200 million being provided to the

Federal government, meant for food security, was terminated due to due to unsatisfactory performance.³⁵

Climate-relevant IDA	Funding (US\$ m)	Active Period
Pakistan Hydromet and Climate Services Project (PHCSP)	188	2018-24
Punjab Green Development Program	200	2018-25
Sindh Solar Energy Project	100	2018-23
KP Hydropower and Renewable Energy Development	727	2020-27
Sindh Flood Emergency Housing Reconstruction Project	500	2022-25
Sindh Flood Emergency Rehabilitation Project	500	2022-27
Sindh Water and Agriculture Transformation Project	292	2022-28
Integrated Flood Resilience and Adaptation Project	213	2023-27

Table 4 List of MDB (World Bank) supported Climate-relevant IDA projects in Pakistan

Project	Funding (US\$ million)
Recharge Pakistan: Building Pakistan's resilience to climate change through Ecosystem-based Adaptation (EbA) and Green Infrastructure for integrated flood risk management	77.8
Community Resilience Partnership Program (CRPP) – multi-country program	750.0
Transforming the Indus Basin with Climate Resilient Agriculture and Water Management	47.7
Pakistan Distributed Solar Project	54.0
Green BRT Karachi – partly financed	583.5
Scaling-up of Glacial Lake Outburst Flood (GLOF) risk reduction in Northern Pakistan	37.5
Acumen Climate Action Pakistan Fund	90

Table 5 Green Climate Fund Financed Projects in Pakistan

These facts highlight the need for improving implementation of programs, while also seeking more grant-oriented assistance rather than IDA loans.

Besides these programs, the Green Climate Fund (GCF) has begun to broaden its footprint in Pakistan in recent years. The GCF was established under the UNFCCC, which governs international climate agreements and finance. The fund raises finance through MDBs and Annex-1 countries (group of developed nations that are signatories to the UNFCCC), and directs finance towards climate adaptation and mitigation projects. GFC is currently funding six programs in the country over a multi-year horizon, with the cumulative grant finance being about \$500 million. While such funding is increasing, designing eligible climate programs requires capacity among national and sub-national governments, which is improving very gradually.

Lastly, over the past two decades, private sector entities have also managed to gain benefits from climate finance opportunities such as through the UNFCCC Clean Development Mechanism (CDM), which encouraged businesses and enterprises to

move towards low-carbon technology by providing carbon-removal credits that hold financial value. In total, 42 projects in Pakistan are listed in the CDM registry. CDM registered projects were able to gain Certified Emissions Reductions (CERs) based on their Carbon offsetting. However, due to a price crash in 2012, the over-supply of CERs meant that many private businesses were unable to sell the CERs and gain financial benefits. In Pakistan, this had been further complicated due to a lack of climate finance framework which could streamline sale of CERs. Currently, the CDM registered projects still hold thousands of unsold CERs, and could not benefit from the scheme. In recent years, large businesses in the cement and textile sectors have begun shifting to Solar power as a cost-cutting measure due to high energy costs in the country.

Overall, in countries like Pakistan, which have a nascent climate governance structure, there is an additional need to assist in building institutional capacity within them, through knowledge sharing and collaborative implementation, such that they can cater to the high standards of 'accreditation' required by international climate finance mechanism.

For example, only 2 entities from Pakistan are accredited with the Green Climate Fund (GCF) – namely JS Bank and National Rural Support Program – which needs to be improved.³⁶ With low visibility and accessibility at such platforms, Pakistan’s ability to seek climate finance is further circumscribed. Cumulatively, through IDA, aid, and grants, Pakistan has

received approx. \$1.4-2.0 billion, per year, during the last ten years, through international climate finance sources. That equates to just \$6.5-8.3 per capita, and exponentially lower than the World Bank’s estimate of \$348 billion required during 2023-2030³⁷ in climate adaptation and mitigation investments to make the country climate resilient.



Clean Development Mechanism (CDM)	
Sr. No.	Project
1	Almoiz Bagasse Cogeneration Project
2	Fatima N2O Abatement Project
3	Waste Heat Recovery Power Plant at Fecto Cement Limited.
4	Waste Heat Recovery and Utilization for Power Generation at Lucky Cement Limited, Karachi Plant
5	Gul Ahmed Combined Cycle Gas Turbine Project
6	Zorlu Enerji Wind Project
7	Partial substitution of coal with alternate fuels at DG Cement, Khofli Sattai Dera Ghazi Khan Plant
8	Waste Heat Recovery CDM Project at Attock Cement Pakistan Ltd.
9	The 84 MW New Bong Escape Hydropower Project, Azad Jammu and Kashmir (AJK), Pakistan
10	Substitution of coal with alternate fuels at Lucky Cement Limited, Karachi Plant
11	DGKCC Waste Heat Recovery and Utilization for 10.4 MW Power Generation at Dera Ghazi Khan Plant
12	“Biogas-based Cogeneration Project at Shakarganj Mills Ltd., Jhang, Pakistan”
13	Waste Heat Recovery and Utilization for Power Generation at Lucky Cement Limited Pezu Plant
14	Reduction of Heavy Fuel Oil usage for Power Generation at Lucky Cement, Pezu, Pakistan
15	Fauji Cement Company Limited Waste Heat Recovery Project
16	Construction of additional cooling tower cells at AES Lal Pir (Pvt.) Limited. Muzaffar Garh, Pakistan.
17	Biomass based cogeneration in Engro foods Supply Chain (Pvt.) Ltd. IRPC, Muridke, Pakistan
18	Catalytic N2O Abatement Project in the Tail Gas of the NA Plant of Pakarab Fertilizer Ltd (PVT) in Multan
19	ICI Polyester Co-generation Project
20	Substitution of coal with alternate fuels at DG Khan Cement Company Limited, Khairpur Plant
21	DHCL Gas Turbine based Cogeneration Project
22	102 MW Gulpur Hydropower Project
23	49.5 MW Sachal Wind Power Project, Jhampir
24	100-MW Solar PV Power Plant at Quaid-e-Azam Solar Park, Lal Sohanra, Cholistan, Bahawalpur, Pakistan
25	Biomass Fuel Switch Project at Sapphire Finishing Mills Ltd. Pakistan
26	Waste Heat Recovery/Utilization for Power Gen. at Maple Leaf Cement Factory Limited, Iskanderabad.
27	Pakarab Fertiliser Co-generation Power Project
28	Community-Based Renewable Energy Development in the Northern Areas and Chitral (NAC), Pakistan
29	Foundation Wind Energy-I Limited 50 MW Wind Farm Project
30	Compost from Municipal Solid Waste in Peshawar, Pakistan
31	Power Generation through Wind Energy at Gul Ahmed Wind Power Limited
32	Patrind Hydropower Project
33	Power Generation through Wind Energy at Metro Power Company Limited
34	Waste Heat Recovery/Utilization for Power Gen. at Cherat Cement Company Limited, Nowshera, Pakistan
35	Low head Hydropower Development Project, Punjab Pakistan
36	Waste Heat Recovery based 15 MW Power Generation Project at Bestway Cement Limited, Chakwal, Pakistan
37	Grid connected combined cycle power plant project in Qadirpur utilizing permeate gas, previously flared
38	Yunus Energy Limited 50 MW Wind Farm Project
39	Foundation Wind Energy-II (Private) Limited 50 MW Wind Farm Project
40	Sapphire 49.5 MW Wind Farm Project
41	Composting of Organic Content of Municipal Solid Waste in Lahore
42	Waste heat recovery and utilization for power generation at DG Cement Khairpur Plant

Table 6 Private Sector Projects in Pakistan in CDM Registry

Climate Budgeting Trends at Federal and Provincial levels

Within the framework of the Federal Government, the CCD plays various crucial roles. These include serving as the designated national authority for all international linkages and pacts, and serving as the lead ministry for providing guidance on climate adaptation and mitigation planning. The ministry spearheads the NDC process and is tasked with projects that align with these goals. While provinces

have established their own Climate Change departments or delegated these responsibilities to their Environment departments, the MoCCEC continues to hold the largest influence, ensuring provincial alignment with relevant policies and legislation.

In recent years, the budget allocations for the Ministry have experienced a period of stagnation following an initial increase. The notable rise was largely attributed to the substantial expenditure on the “Scaling up of Green Pakistan Program” (or Ten Billion Tree Tsunami Project). At present, the federal

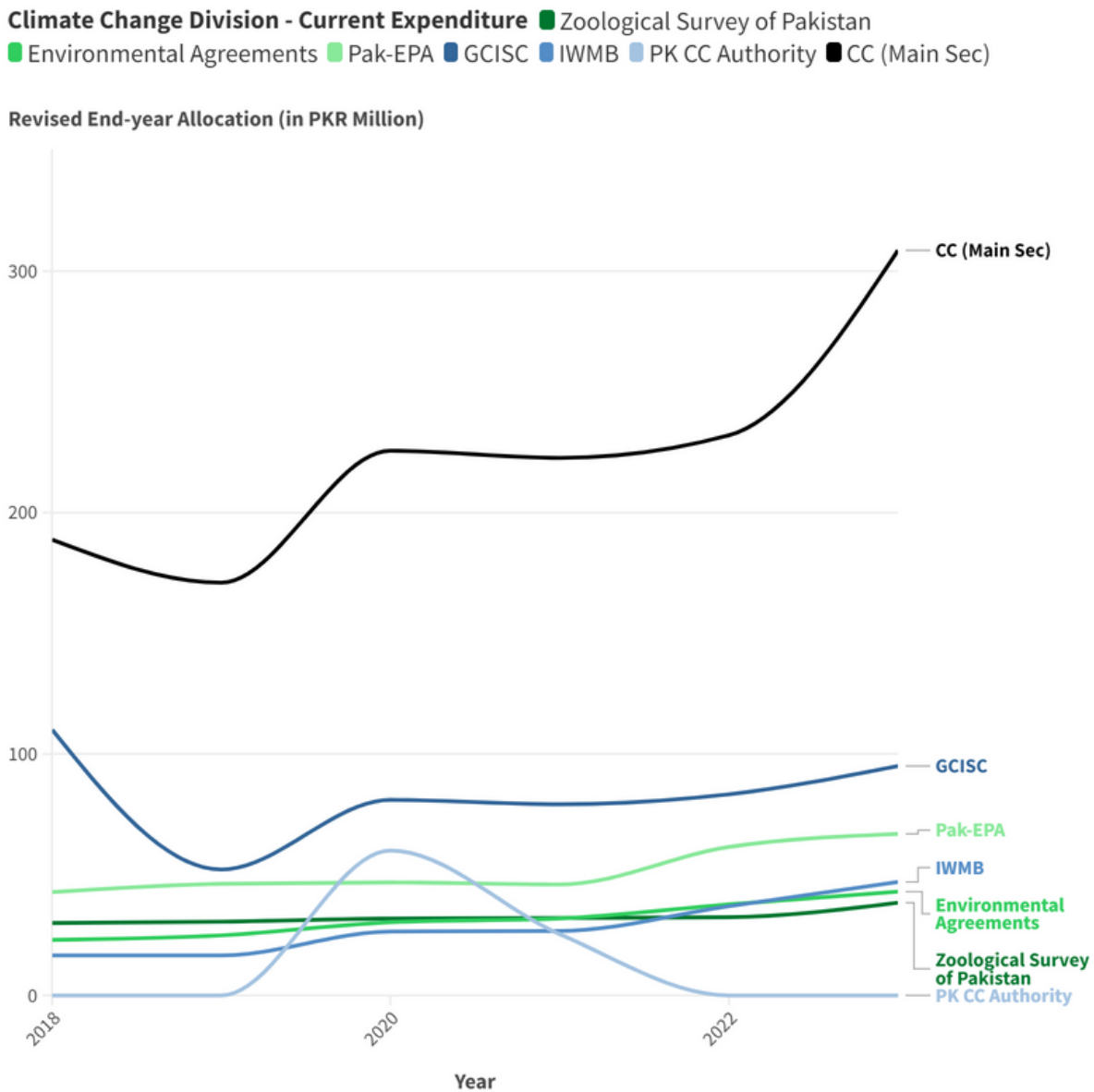


Figure 2 Breakdown of Current Expenditure Under Climate Change Division

Climate Change Division - Development Expenditure - Green Pakistan Programme

- GPP - Revival of Forestry Resources
- GPP- Revival of Wildlife Resources
- TBTP Phase 1 (Upscaling of Green Pakistan Program)
- GPP- Strengthening of Zoological Survey

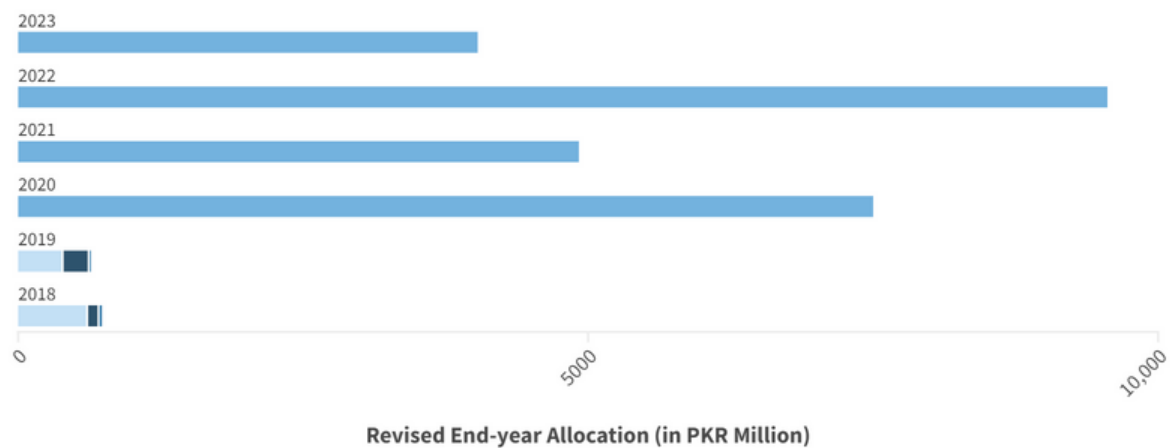


Figure 3 Much of the Development expenditure is directed towards the 'Ten Billion Tree Tsunami Programme' (also called Green Pakistan Programme)

Climate Change Division - Development Expenditure - Non Green Pakistan Programme

- Capacity Building on Water Quality Monitoring & SDG 6.1
- Climate Resilient Urban Human Settlements Unit
- Establishment of Pakistan WASH SPCU
- Establishment of Geomatic Centre for Climate Change
- Establishment of CCRU
- Sustainable Land Mgmt Prog to combat Desertification

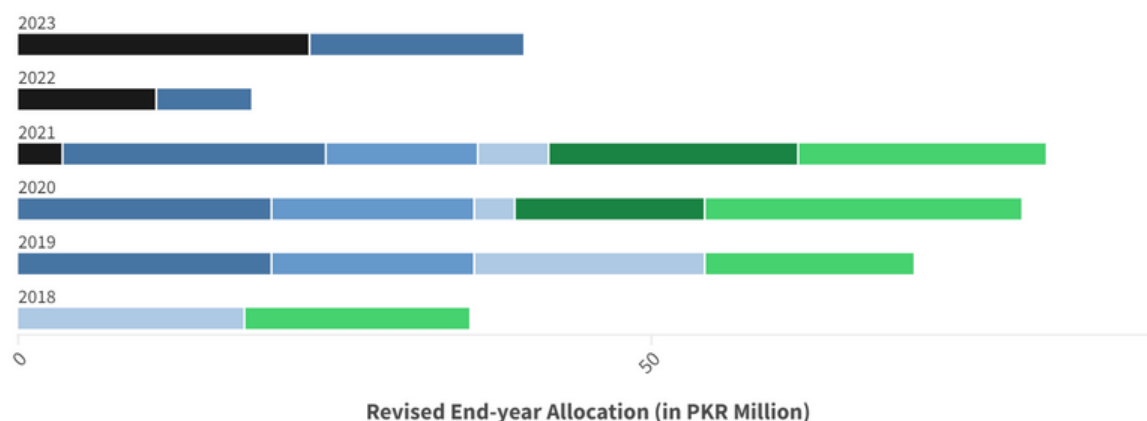


Figure 4 Less than PKR100m per year in Development expenditure has been directed towards other projects

government does not appear to be directly implementing development initiatives through its own resources. Furthermore, lack of climate finance flows compounds the issue, resulting in a relatively small project portfolio. The year-end revised allocations (as highlighted for 2023), illustrate low spending on development initiatives but higher spending for current expenditures than allocated in the budget.

The Ministry also houses a cell to oversee international projects, which are being implemented directly by a development partner without any flow of finances to the government. This is a norm for small, grant-based interventions, where government only guides, monitors, and supports the implementation. However, with newly initiated GCF-funded projects, it is anticipated that

future governments will increasingly vie for access to such funds, particularly in light of the country's current account challenges.

While federal budgetary information is organized in a uniform and understandable format, each of the Provinces follow differing formats, making it difficult to provide comparable analysis. Therefore, to analyse trends at the Provincial level, the sample has been limited to Environment and Climate Change (E&CC) spending in Punjab and Khyber Pakhtunkhwa, under the provincial Annual Development Programs (ADPs).

Snapshot of Punjab

The Punjab province has been provided assistance through the World Bank under 'Punjab Green Development Program' (PGDP) since 2018. This is reflective in the ADP, where almost all schemes under E&CC are linked with PGDP. However, among the schemes not all are climate-oriented, and include infrastructural additions such as division-level environmental office complexes. Therefore, direct spending on adaptation or mitigation projects under E&CC is limited. Within the overall spending under the ADP, the proportion for E&CC is meagre.

Provincial Expenditure (Punjab) - Climate Change & Environmental Division						
In PKR Millions						
SCHEME	Estimated Cost	Allocation*				
		2018-19	2019-20	2020-21	2021-22	2022-23
On-going Scheme						
Development of Biodiversity Parks in Collaboration with City District Governments, District Governments and Business Communities	181.611	19.111	19.111			
PC-II for Rationalization, Revision and Development of Environmental Quality Standards and Industry	29.793	20	10			
Capacity Building of EPA Punjab for Enforcement of Environmental Standards in Punjab including Combined Effluent Treatment Plants (CETPs) and Industrial Estates	295.331	230.201	226.021	142.105	148.074	
Strengthening of Strategic Planning and Implementation Unit (PGDP)	845.229	100	150	150	150	200
Construction of Green Building for EMC / Lahore	101.6					101.6
Development and Implementation of Plastic Management Strategy and Regulation on Production and Consumption of Single-Use Plastics	20				20	11
Disclosure of Environmental Information and Citizen Engagement	70				15	46
Establishment of Environmental Endowment Fund Management Unit	103.5				40	11
Enhanced Air Quality Monitoring System in Punjab	2670					1500
Development of Missing Environmental Quality Standards and Revision of Existing Standards	75					30
Enhanced Water Quality Monitoring System in Punjab	1400					200
Total	5792.064	369.312	405.132	292.105	373.074	2099.6
New Scheme		2018-19	2019-20	2020-21	2021-22	2022-23
Establishment of Environmental Monitoring Center	4072.992	20	15	52.475	100	40
Restructuring/Automation Regime of Environment Protection Department	2615.046	50	90	38	600	50
Construction of Green Building for EMC, EPD and Allied New Entities				15	500	298.4

SCHEME	Estimated Cost	Allocation*				
		2018-19	2019-20	2020-21	2021-22	2022-23
New Scheme						
Pilot of Low Cost Wastewater Treatment (Study)	1041.39	20				10
PLASTIC Management Strategy /Public Communication Campaigns on the Negative Environmental and Health Impacts of Single-use Plastics	50			15		50
5 Investigation of Sources of Particulate Matter for Informed Decision Making in Punjab	838					200
Environmental Monitoring of Industrial Effluent Deteriorating the Quality of River Ravi in Sheikhpura & Faisalabad	200					100
Enhanced Air Quality Monitoring System in Punjab	1191.813	80	294.868	352.36	1000	
Development of Missing Environmental Quality Standards and Revision of Existing Standards	260	105.688	65	5.06	25	
Enhanced Water Quality Monitoring System in Punjab	607.4			100	400	
E-Environmental Governance Initiative	100				50	
Piloting Outcome of Revitalizing the Ecosystem of Ravi River Basin (TA by Asian Dev Bank)	200	20	5	2		
Disclosure of Environmental Information and Citizen Engagement	370.272	50	10	15		
Establishment of Environmental Endowment Fund Management Unit	6364.05	220	10	10		
Strengthening of Program Coordination Unit (PCU) of Punjab Green Development Program (PGDP) in P&D Board	30			10		
Establishment of Decision Support System for Climate Risk Screening & Disaster Impact Assessment	40			10		
Consultancy regarding Sustainability of Water Extraction in Kahoon Valley and Krauli Dam	30		20			
Demonstration Project on Industries for Urban Centers, Relocation of Tannery Units to Sialkot Tannery Zone and its Operationalization	1041.39	50	5			
Establishment of Environmental Policy Center	266.133	30	5			
Pilot/Demonstration Resource Efficiency & Cleaner Production Investments in key Industrial Sectors	6688.038	20	5			
Development and Implementation of Policy and Legal Framework for Better Environmental Governance	578.55	25	5			
Establishment of Environmental Laboratories at DG Khan and Bahawalpur	250		65			
Establishment of Environmental Technology Center (PGDP)	1562.085	20				
Construction of Environmental complexes across Punjab	1050					300
Technical Support for Program Implementation and Independent Verification (PGDP)	694.26	20				
Improving Environmental Governance in Punjab through Capacity Building of existing EPA Field Offices.	810	100				
Total	30951.419	830.688	594.868	624.895	2675	1048.4
OTHER DEVELOPMENT PROGRAM						
Capitalization of Environment Endowment Fund	-	-	-	5000	1951.926	1852
Total				5000	1951.926	1852
GRAND TOTAL	36743.483	1200	1000	5917	5000	5000

Table 7 Punjab Environment & Climate Change ADP Schemes from 2018 to 2023

Snapshot of Khyber Pakhtunkhwa

The overall ADP outlay in KP is significantly lower than Punjab due to differences in the size of the two provinces as well as availability of finances. While in some regards KP has higher vulnerability to various climate risks, the Provincial ADP did not exceed yearly allocation of PKR 50 million in any financial year compared to Punjab’s recent allocations of PKR 5000 million, in the period analysed, but similar to Federal non-GPP development

expenditure. However, during the same period a major part of Federal GPP (TBTP) spending was directed towards afforestation and reforestation activity within the geographic limits of KP, which reduced the need for province to broaden spending on environment and climate change schemes.

As discussed earlier, direct allocations from respective ministries at federal and provincial levels towards climate objectives remain limited, and heavily dependent on a single

Provincial Expenditure (Khyber Pakhtunkhwa) - Climate Change & Environmental Division						
In PKR Millions						
SCHEME	Estimated Cost	Allocation				
		2018-19	2019-20	2020-21	2021-22	2022-23
On-going Scheme						
150057 - Activity Based Capacity Building of EPA in Khyber Pakhtunkhwa (A)PDWP 21/01/16	94.792	16.906	16.182	1.3		
160167 - Strengthening of EPA Monitoring Through Geographic Information System (GIS). (A)DDWP 06/09/16	3.9	3.259				
170115 - Inventory of Industrial Pollution in Khyber Pakhtunkhwa. (A)DDWP 21/11/17	31.767	11.834	19.818	18.165		
190153 - Introduction of Zigzag Technology in Construction and Operation of Brick Kilns in Khyber Pakhtunkhwa. (A)/DDWP /21-11-2019	11.285			10.535	9.285	2.285
191413 - 090036-Establishment of Environment Cell in Environment Department, KP. (Reg.Dev) [MA] (A)PDWP 29/01/19	105.973			10		
210657 - Shifting of EPA Lab to Forest Complex Shami Road and Establishment of O3 Regional Labs at Abbottabad, Mingora and D.I.Khan (A)/DDWP /29-12-2021	222.05					30
210112 - Establishment of EPA Offices in Merged Districts	127.131					10
Total	596.898	31.999	36	40	9.285	42.285
New Scheme						
180490 - Scaling-up of Glacial Lake Outburst Flood (GLOF-II) risk reduction in Northern Pakistan (UNDP Assisted) (A)PSC 17/07/18	1363.82	0.001				
180432 - Establishment of EPA offices	100	5			10	
190153 - Introduction of Zigzag Technology in Construction and Operation of Brick Kilns in Khyber Pakhtunkhwa.	20		4			
210657 - Shifting of EPA Lab to Forest Complex Shami Road and Establishment of O3 Regional Labs at Abbottabad, Mingora and D.I.Khan	200				30.715	
220226 - Updating of Environmental Profile and Development of Inventory of Industrial Pollution in KP	168.65					4.53
Total	1852.47	5.001	4	0	40.715	4.53
GRAND TOTAL	2449.368	37	40	40	50	46.815

Table 8 Khyber Pakhtunkhwa Environment & Climate Change ADP Schemes from 2018 to 2023

major program. In the centre, the allocation as part of the total budget outlay on average is around 1 percent, while in Punjab it is below 1 percent and in KP below 0.5 percent. Similar trends are likely for other provinces. As climate impacts increase, higher resource allocations will become necessary. It is also concerning that Provinces now hold jurisdiction over a much wider geography, and should lead adaptation and mitigation schemes, however, their allocations are lower than the Federal government’s towards climate change.

Review of Pakistan’s PFM System

The constitution of Pakistan provides the legal foundation for Public Financial Management in the country, and is further supplemented by Financial Rules and Rules of Business at both federal and provincial levels. The approved budget is implemented through a finance bill, which has to abide by the constitutional and legal guidelines. Once approved, the bill sets the expenditures for all Government Ministries, Divisions, Departments, Statutory Bodies, and so on, for the fiscal year. General Financial Rules and Treasury Rules further guide the financial management and controls. The government is required to be transparent and disclose information publicly, with the intention of involving public opinion in decision-making. It also adds multiple dimensions of internal and public accountability, which acts as a hindrance against misappropriations or inefficient budgeting. The Auditor General of Pakistan (AGP) was established in 1973. Further, in 2001, new laws were introduced to separate it into two bodies – the AGP and the Controller General of Accounts. These institutions function as the primary overseers of financial spending in Pakistan, and largely follow practices similar to Audit and Accounts regimes in peer countries.

PFM in Pakistan involves complex institutional arrangements, similar at both federal and provincial levels. At the center is the role of the parliament, which established and can

bring amendments into the PFM system, and passes the annual finance bill. Combined with the provincial assemblies they authorise revenues, expenditures, and debts. The Public Accounts Committees (PAC), both at federal and provincial levels, are empowered to investigate expenditures, and the Auditor General of Pakistan (AGP) is required to present its reports to the committee. Recommendations on distribution of revenues is given by the National Finance Commission (NFC), which bases its decision on a set criteria including level of development, population, special needs of certain provinces, and, in recent years, there have been calls to include climate risks in the criteria as well. The actual planning for development schemes – including Environment & Climate Change sector – happens at the Federal Planning Commission (PC) and Provincial Planning & Development Departments (P&DD). Alongside, the Ministry of Finance at the federal level along with the Finance Departments at the provincial level are responsible for budget preparation and expenditure control. Federal Board of Revenue (FBR) has the main responsibility to regulate, administer and reform tax regime in Pakistan. Provincial Revenue Authorities regulate and administer provincial taxes.

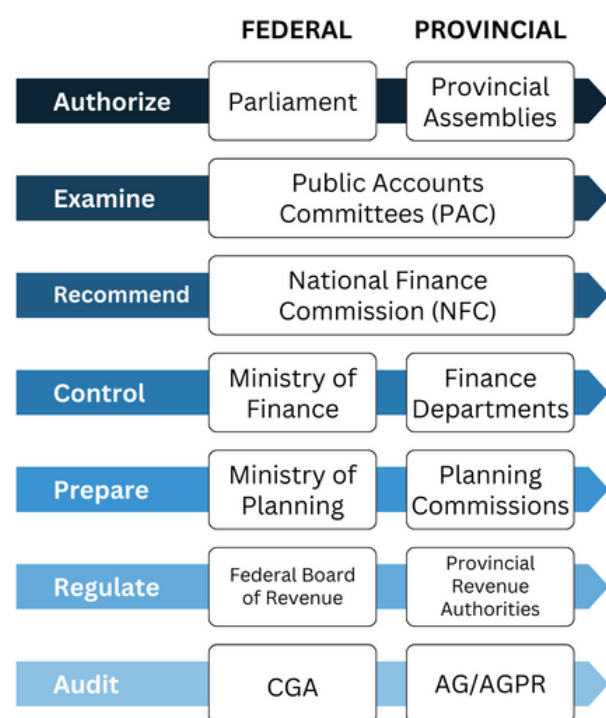


Figure 5 Structure of Pakistan’s PFM System

Lastly, the Controller General of Accounts (CGA), with an extensive network of offices, makes payments, maintains accounts, and prepares annual financial statements. The provincial Accountant Generals (AG) and the Accountant General Pakistan Revenues (AGPR) report to the CGA at the Federal level. The Auditor General (AGP) is the Supreme Auditing Institution of the country that reviews financial compliance and conducts performance audits.

Accountability System

Pakistan's public sector functions within a framework designed to promote transparency, integrity, and good governance. This framework is overseen by a network of federal and provincial institutions, each playing a distinct role in upholding accountability. Besides the PAC and AGP, the National Accountability Bureau (NAB), established in 1999³⁸, acts as the leading anti-corruption agency, investigating and prosecuting individuals accused of corruption, white-collar crime, and misuse of authority. NAB also maintains a network of offices throughout the provinces, monitoring and investigating public offices, in case of possible misappropriations or corruption.

Alongside, Provincial governments have also established Anti-Corruption Establishments (ACEs), which have jurisdiction limited to a single province, but have a similar mandate as NAB. Their effectiveness and use has been criticised for possible duplication of work, resource limitations, and potential political influence.

Separately, the office of the Ombudsperson also performs the role of a watchdog against maladministration and misuse of authority by government officials. Ombudsperson offices exist both at the federal and provincial levels, and hold jurisdiction to direct officials, respectively. While these bodies have so far only dealt with traditional forms financial management and development spending, it is likely that their roles could expand to climate

finance in the future, especially if quantum of climate finance and expenditure rises significantly.

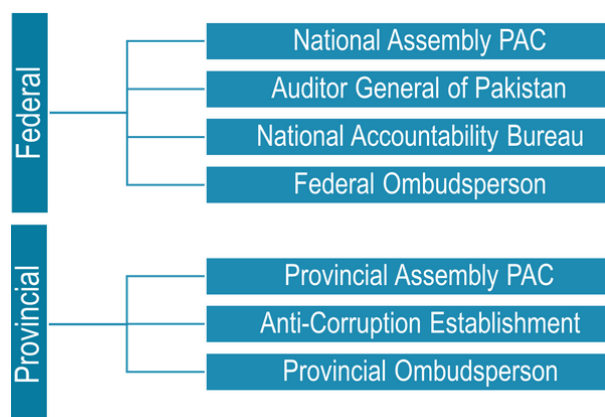


Figure 6 Structure of Accountability System

Climate Planning & Budgeting

While the PFM system is theoretically geared towards effective planning and budgeting, in its current form it may not be suitably aligned with the needs of climate governance and finance. The PFM system has established a standardized approach to annual budgeting, where the Medium-term Expenditure Framework (MTEF) and Medium-term Budgetary Framework (MTBF) form the key guidance for ministries to set their budgets and plans.

The MTEF is a structured approach to integrating fiscal policy and budgeting over a multi-year horizon, while the MTBF is spread over a shorter period, and includes a ‘top-down guidance’ that simultaneously invites feedback in the form of ‘bottom-up input’ from every line-ministry.

In relation to climate finance, both are important, the MTEF – for setting a long horizon agenda – and MTBF – for climate project planning. The latter, however, is doubly important because it impacts allocations and spending on climate-oriented initiatives more directly. To align PFM with climate finance, it is necessary to introduce climate change as a multi-sectoral theme at each stage of traditional forms of financial management.

Suggested Improvements

Besides advancing climate through policy instruments, improvements are required at the project stage as well, where the planning, budgeting, implementation and post-implementation phases incorporate climate-relevant features.

Planning & Budgeting

The updated NCCP (2021) and Framework for Implementation should be adequately inculcated into the process by additions into the Budget Strategy Paper. This will ensure a high-level recognition for climate-relevant planning. It should also highlight the need for such plans as an important stepping-stone to accessing higher volumes of international climate finance.

Similarly, each sector, such as energy, health, transport and communication, etc, should align priorities in line with NCCP, and the Budget Call Circular should call on relevant Ministries to plan according to sectoral adaptation and mitigation suggestion in the

framework for implementation.

Project Design

While project PC-Is and PC-IIs already require Initial Environment Examination (IEE), and Environment Impact Assessment (EIA) or Environment & Social Impact Assessment (ESIA) depending on the type and scale of project, this stage needs to further integrate climate change metrics to inform decisions. This can be done by including a Climate Benefit Assessment. At the PC-I appraisal stage, a scoring checklist can be introduced to evaluate climate alignment of the project.

Integrity & Transparency

Comprehensive Climate Budget Tagging (CBT) is long due at both the Federal and Provincial levels. In internal Government Financial Management Information System (GFMS), limited tagging is done. However, this practice needs to be widened and made part of publicly available budget data or produced as a separate report on climate finance. Recording the type of climate project, source of finances, and total climate benefit will create trust

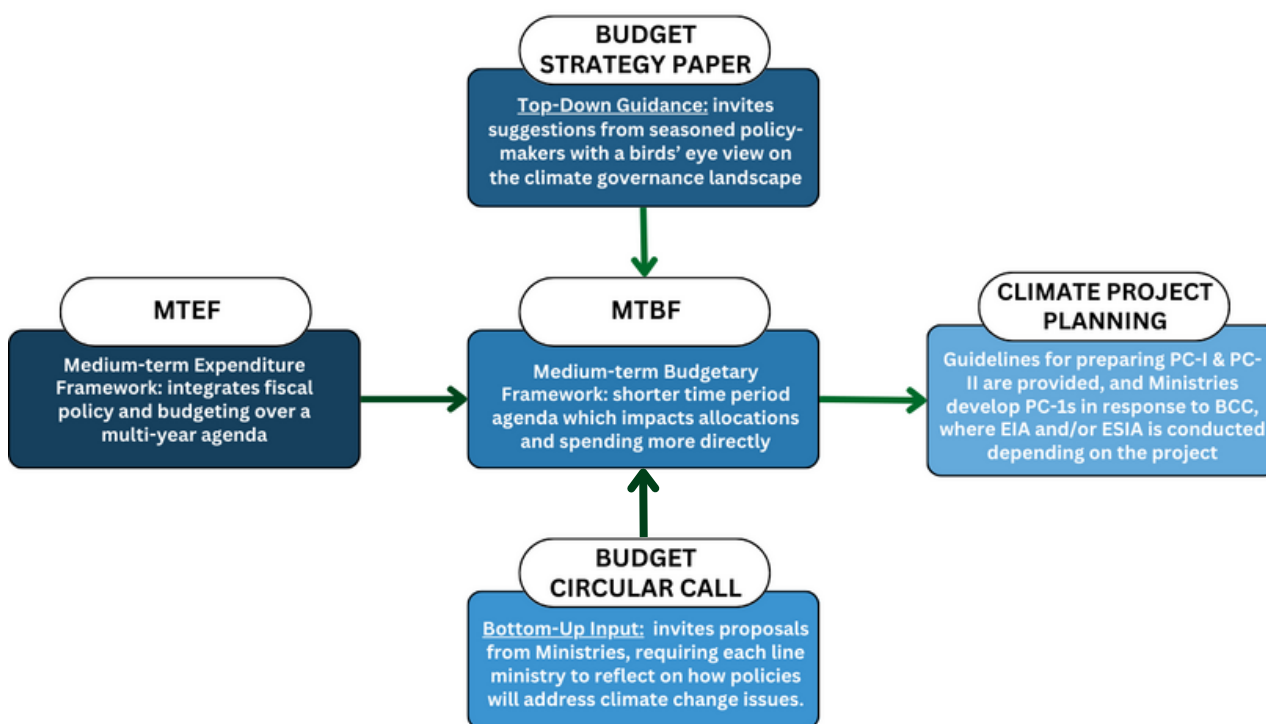


Figure 7 Climate Project Planning Through the PFM System

among key stakeholders as well as act as an incentive for various sectors to increase their climate-oriented spending. Separately, to increase comparability the MoCCEC should create a template to report climate spending across departments and provinces. Disparate formats discourage equal stakeholder interest and can also act as a barrier to inter-provincial collaboration and coordination. This can also allow performance evaluation and help recognize better performers.

Lastly, accountability is highly dependent on the Auditor General Office, hence, targeted capacity-building among auditors in order to include costing of emissions, abatement and

offsets can shift reporting of adaptation and mitigation projects towards a more realistic representation. This information is also crucial when financial reports are to be presented to accountability bodies, such as the Parliamentary Public Accounts Committee, which needs to see the projects' rationale. Other accountability and corruption-control bodies, such as the National Accountability Bureau (NAB) and Provincial Anti-Corruption Establishments (ACEs), will also need capacity enhancement as climate-relevant projects and expenditures are likely to increase, and may face misappropriation much like traditional development spending.

Climate Governance Around the Globe

A large number of countries now have devised climate strategies or policies, and most have formulated climate change legislation. According to Grantham Research Institute on Climate Change and the Environment, as of September 2022, there were 2,860 climate related laws; this is a significant increase from just 60 climate related laws in 1997.³⁹ Due to the cross-cutting nature of climate change, it has been integrated into other sectoral strategies and plans in priority areas such as energy, transport, industrial policy, agriculture, forestry, and land use. These changes illustrate the increased importance of a ‘whole of government’ approach as well as rising compliance to international climate commitments by devising climate governance frameworks that help to achieve countries’ objectives and NDCs.

Benchmark Best Practices for Climate Governance Integrity

To improve Climate governance integrity, both in terms of policy-making and financial management, it is important to establish guiding benchmarks based on best practices.

For example, three of the largest historical GHG emitters, the United Kingdom, Germany and France are today recognized as climate governance leaders. All three also rank highly in Transparency International’s Corruption Perception Index (CPI). These countries have also devised their own contextual forms of climate-responsive budgeting and planning using a combination of suited approaches and tools. Their example can provide some guidance to countries like Pakistan as to how

they can practically adopt and inculcate these frameworks.

Germany is a federal republic, like Pakistan, but historically, it has followed a greatly decentralized administrative structure. The close coordination between the Centre and States has seen it establish long-term decarbonization strategies and implement them. The country is the 3rd largest exporter in the world and has long been a base of traditional manufacturing industries, which are heavily dependent on fossil fuels. It is also the largest economy in the European Union (EU), and as a member state, it also has to comply with EU’s climate goals. While the country still produces significant Greenhouse gases (GHGs), it has managed to decarbonize since the 1990s from ‘Business as usual’ (baseline) levels, while maintaining economic growth.

As one of the first countries to embark on an energy transition strategy, Germany had aimed to be a ‘first mover’ in low-carbon industries by moving to renewables and closing heavy polluting industries. It has further committed to reducing GHGs by 88% from baseline levels by 2040, and GHG neutrality by 2050. These climate targets and commitments have also been made binding and given legal backing, under the ‘Climate Protection Act’ – a world first – made by the German Federal Government (Bundesregierung) in 2019. Much of this success and planning have been made possible because of a well-established and transparent governance system, which is also participatory in nature, involving all tiers of government.

The UK on the other hand has accelerated its energy transition to such an extent that 40%

of all energy used in the country comes from renewables, while it also has a strong Net-Zero commitment. Separately, the UK, which is a parliamentary democracy like Pakistan, is recognized as a benchmark in Green or Climate budgeting best practices. Among EU and OECD countries, the UK has led the integration of climate change into its Public Financial Management system.

These practices are categorized under four main themes:

- Establishing a strategic framework, underpinned by high-level political commitment (similar to Germany’s Climate Protection Act);
- Prepare and implement an array of climate budgeting tools and methods;
- Promote efforts for accountability and transparency over climate spending;
- Create an enabling environment, where relevant government ministries and departments develop capacity to improve climate governance.

The UK has employed these practices successfully in its climate planning and budgeting, and provides a useful guide for other countries attempting to implement climate governance frameworks.

Lastly, France adopted a unique tagging methodology, involving scoring based on positive and negative outcomes for its climate

goals. In essence, it grades government plans on a scale, ranking them as Unfavorable (-1), Neutral (0), Favorable but controversial (1), Favorable (2), and Very favourable (3), based on short-term and long-term outcomes for environment and climate change.

Approaches to Strategic Planning

Different approaches or a combination can be used to create an overarching strategic plan or framework that guide climate governance. These include the Climate Public Expenditure and Institutional Review (CPEIR), the Climate Change Budget Integration Index (CCBII), and the Public Expenditure and Financial Accountability (PEFA) Climate module. These, at times, have been complemented by Climate Change Financing Frameworks (CCFFs). Climate Public Investment Management Assessments (Climate-PIMA) have also been conducted in multiple countries.

Many countries have also made use of Climate Change Financing Frameworks (CCFF) or Climate Fiscal Frameworks (CFF). The frameworks help guide the alignment of existing PFM systems with newly adopted Climate Change policies, gearing them towards implementing commitments such as NDCs and NAMAs. These complement the CPEIR by

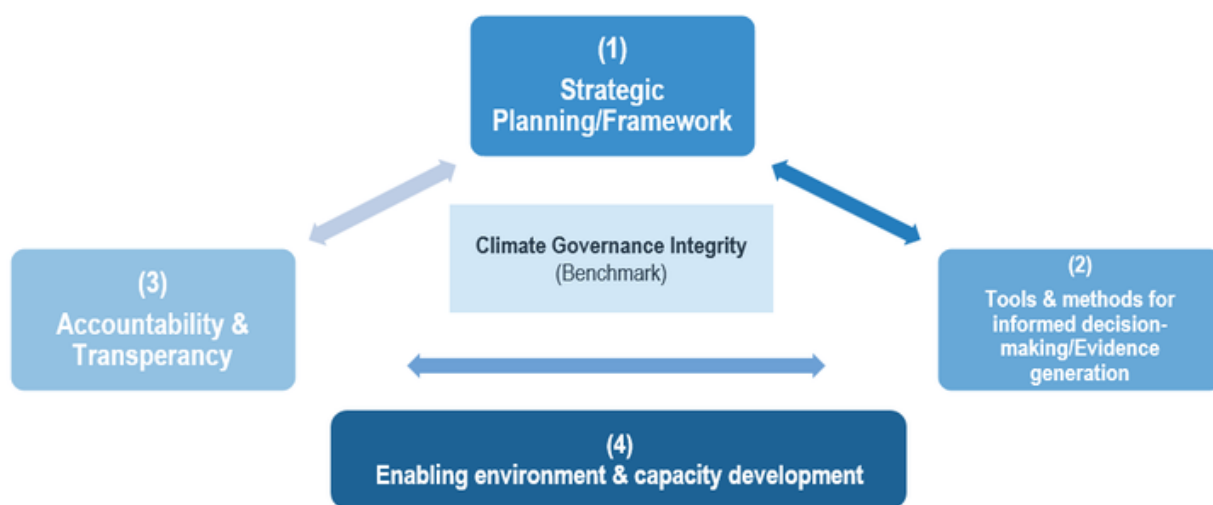


Figure 8 Hypothetical benchmark based on best practices for Climate Governance Integrity

<p>Climate Public Expenditure and Institutional Review (CPEIR)</p>	<p>The CPEIR is the most commonly used diagnostic tool, which is based on the World Bank’s standard public expenditure review methodology. It provides a qualitative and quantitative analysis of a country’s public expenditures in relation to climate change. The analytical framework is based on three key pillars: policy analysis, institutional analysis and climate public expenditure analysis. It is often the starting point for mainstreaming climate change into PFM systems. CPEIRs allow governments and civil society to assess the trajectory of climate-related spending. In theory, this provides evidence that can motivate governments to increase the priority given to climate change programs.</p>
<p>Climate Change Budget Integration Index (CCBII)</p>	<p>The Climate Change Budget Integration Index (CCBII) is an innovative tool that helps to measure the level of climate change integration into national PFM systems. There is also the CCBII++, which includes gender and social inclusion. Periodic use of CCBII and CCBII++ can help countries to track and compare progress over time.</p>
<p>Climate Public Investment Management Assessments (Climate-PIMA)</p>	<p>The new Climate Public Investment Management Assessment (Climate-PIMA)⁴⁰ framework can help countries to assess the integration of climate change policies into their public investment management processes. The framework applies across the full budget cycle, from plans to appraisal and reporting.</p>

Table 9 Examples of Frameworks used for integrating Climate into Planning & Budgeting

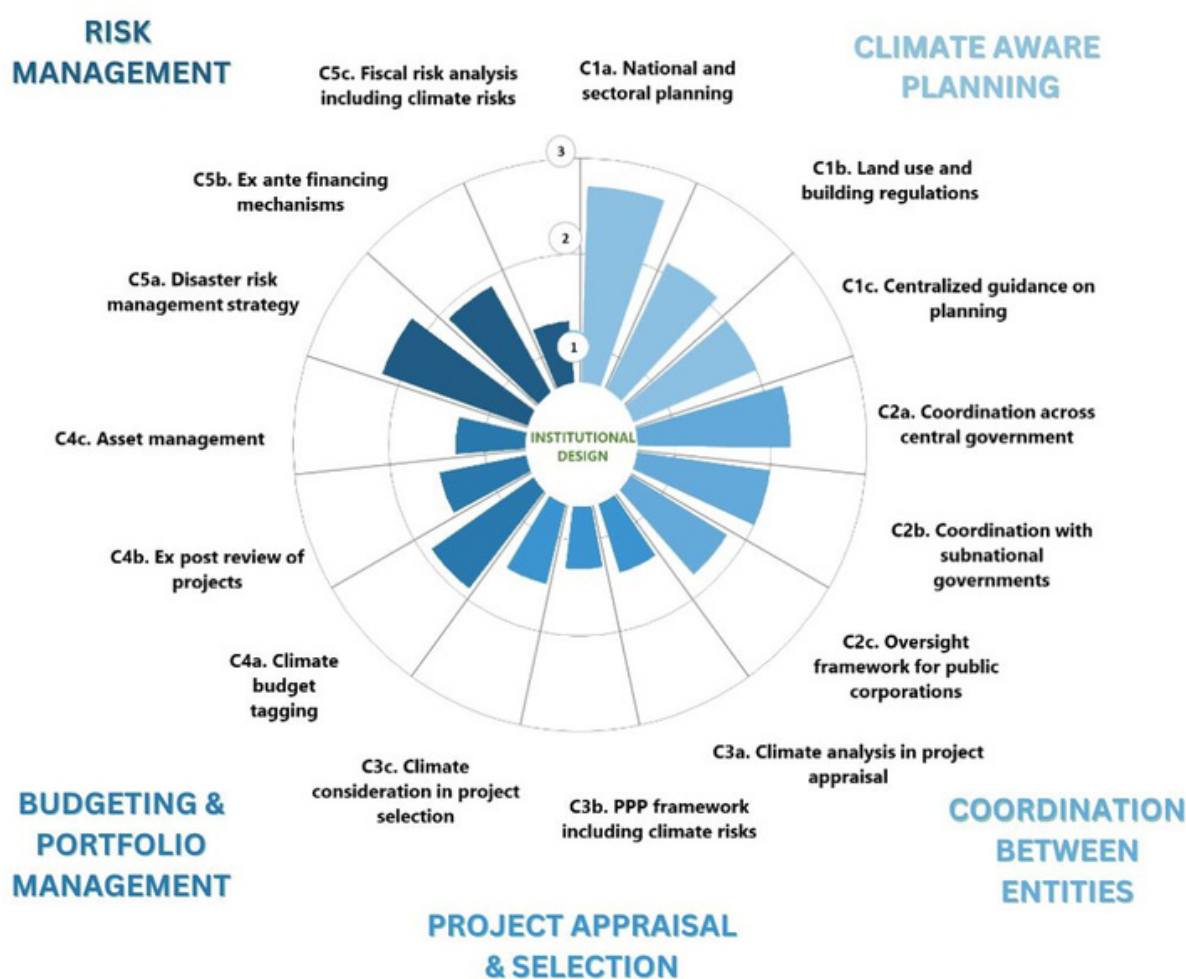


Figure 9 Climate-PIMA framework (adapted from IMF C-PIMA guide)

assessing future financing needs, and outline the expected role of domestic and international public and private finance in meeting those needs.

In Pakistan, the United Nations Development Program (UNDP) attempted to create awareness on CCFFs, producing a national and provincial assessment in 2017, but since then it has received little interest from various governments. In the past year, there has been renewed interest in devising national and provincial climate finance frameworks, particularly to generate revenue for the cash-strapped government.⁴¹

Climate Planning Tools & Methods

Several tools can be used to develop evidence for both climate policy-making as well as program designing and review. Within limited finances, such assessments can also assist governments with decision making on selecting the best policy or program.

Analysis Methods

CBA, CEA and MCA methods are summarized in Table 10 below:

Reporting/Review methods

Climate change is cross-cutting, and public expenditure on climate change adaptation and mitigation is typically shared across a number of ministries, such as, energy, transport, agriculture, and public works. There has been growing interest by governments to tag their climate-related expenditure as this can provide information on the impact of budget policy on climate goals.

Climate budget tagging (CBT) is considered the ideal and a low-investment method of reporting or reviewing climate spending. It defined as, ‘a tool for identifying, classifying, weighting and marking climate-relevant expenditures in a government’s budget system, enabling the estimation, monitoring and tracking of those expenditures’. One of the key benefits of CBT is efficient, consistent, and transparent reporting of climate expenditure levels, both in budget allocations and in actual expenditure. Some countries have been able to develop full stand-alone reports based on CBT. Bangladesh, for example, produces Climate Financing for Sustainable Development Budget Report, every year, reporting all climate relevant allocations across all government ministries, and the data is also available for review to all stakeholders.

<p>Cost-Climate benefit analysis (CBA)</p>	<p>This allows the comparison of costs and benefits of an investment or intervention over time. It is commonly used when outcomes are expressed in monetary terms.</p>
<p>Cost effectiveness analysis (CEA)</p>	<p>This determines how an objective can be achieved in the most cost-efficient way. It is often preferred when it is difficult to assign monetary value to benefits.</p>
<p>Multi-criteria analysis (MCA)</p>	<p>This provides systematic methods for comparing quantitative and qualitative decision criteria, providing the possibility to rank and prioritize multiple adaptation options. The prioritisation is based on economic factors and the qualitative assessment of criteria, for e.g., feasibility, cost-effectiveness, co-benefits, ease of implementation, etc. It is generally used when benefits cannot be measured quantitatively or when there are multiple benefits which are difficult to aggregate.</p>

Table 10 Methods of Analyzing Climate Policy & Program Designs

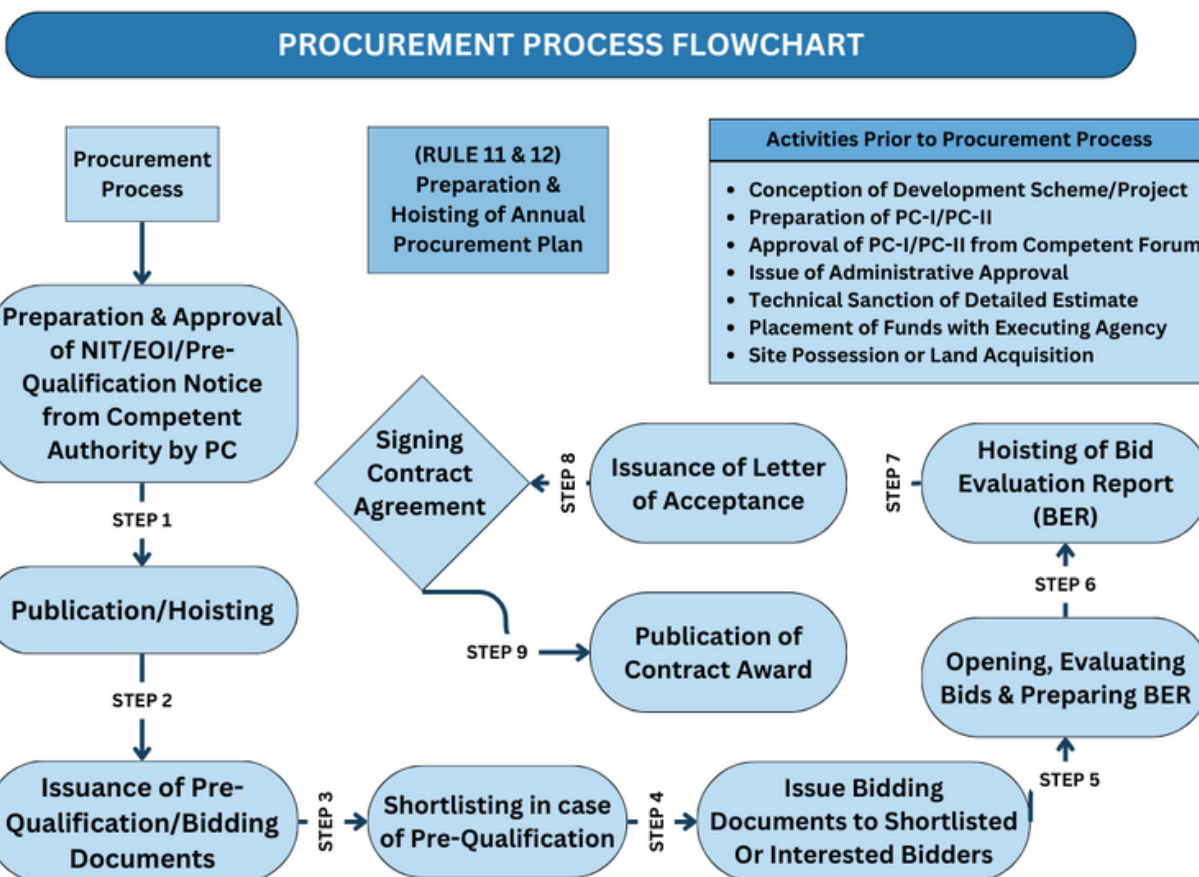
Climate Responsive Procurement

Climate responsive procurement requires the integration of climate change and environmental criteria into the procurement process, taking into consideration the whole product life cycle. Climate change criteria could cover the different stages of procurement, such as, the selection of suppliers, technical specifications, award criteria, and contract performance.

Climate change should also be embedded into procurement policies and systems. Often, climate sensitive public procurement is driven by the ministry of environment; however, they do not have direct authority over procurement policy, nor are they involved in daily procurement operations. Scaling up climate-sensitive procurement requires active engagement from the public procurement agency, which is usually part of or under the oversight of the Ministry of Finance. The procurement agency is responsible for procurement policy, regulation, and technical support, including capacity building for procurement entities.

For example, all EU countries apply green public procurement on a voluntary basis, and the European Commission has developed standardized environmental procurement criteria for twenty-one product groups. The criteria are designed to make it easier for procuring entities to buy goods, services and works with reduced environmental impacts, covering selection criteria, technical specifications, award criteria, and contract performance criteria. Procuring authorities may choose, according to their needs and ambition level, to include all or only certain requirements in their tender documents (European Commission, 2016). To facilitate the adoption of green public procurement, a number of EU countries have introduced additional measures that increase the capacity of procuring authorities to apply green public procurement.

In the context of Pakistan, procurement rules and the public procurement regulatory bodies are present at the federal and provincial level. The Public Procurement Regulatory Authority (PPRA) of Pakistan is an autonomous body endowed with the responsibility of prescribing



regulations and procedures for public procurements of goods, works and services by Federal Government owned public sector organizations and semi-autonomous bodies. It is also endowed with the responsibility of monitoring procurement by public sector agencies/organizations.

The Public Procurement Regulatory Authority (PPRA) was created by the Federal Government through a Presidential Ordinance in 2002. Later, Public Procurement Rules (PPR) were notified in 2004 followed by the adoption of first set of public procurement regulations in 2008, and the consultancy services regulations in 2010. These Rules and Regulations, largely made with the assistance of the World Bank, are applicable to the procurement of goods, works and services.

Following the federal PPRA Rules of 2004 and Regulations of 2008, the provinces established their own respective procurement authorities and procurement rules, majorly in line with the federal PPRA rules 2004. This new system responds to the international best practices of value for money, efficiency, transparency, accountability, fair competition and good governance.

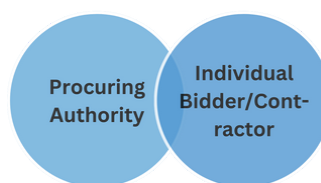
In the context of Pakistan, it is relevant that procurement is done under a uniform policy, and focuses on reduced wastage and optimum utility. As described earlier, many projects at the Federal and Provincial levels are in the form of assistance from MDBs or other bilateral development partners, which usually implement their own procurement rules, overwriting national public procurement rules, and thereby often risk wastage and excessive spending.

Potential of Integrity Pacts to Minimise Corruption and Generate Market Competition in Adaptation and Mitigation Projects

Integrity Pacts are agreements that are entered into between procuring authorities and bidding companies/selected contractors.

Normally, a civil society organisation monitors the compliance of all stakeholders with these agreements.

Integrity Pacts ensure transparency in all stages of the procurement process, from needs assessment to contract management and payment. Integrity Pacts prevent corruption by providing adequate incentives and sanctions for both the public authorities and the bidders. Integrity Pacts detect corruption, in particular through a whistleblowing system that both encourages and protects against potential retaliation. In doing so, Integrity Pacts build confidence among all stakeholders.



Integrity Pacts are concluded between the procuring public authority and the bidding companies – ideally before the start of the bidding process.

Both sides commit themselves with the following:

- Both sides to refrain from paying, offering, soliciting or accepting bribes;
- Bidders not to collude with other bidders to obtain the contract;
- Selected contractors, not to bribe representatives of the authority while executing the contract;
- All sides to immediately report any indications of wrongdoing, in order to allow the public authorities and/or the bidding companies to fix the situation;
- Procuring public authorities, to impose disciplinary measures and/or sanctions on the bidding companies (including fines and contract termination) as well as on their own staff when caught violating the commitment.

In the context of Pakistan, Public Procurement Regulatory Authority Rules (PPRA) 2004 Rule 7 mandates that “the procurements exceeding the prescribed limit shall be subject to an integrity pact, as specified by regulation with approval of the Federal Government, between

the procuring agency and the suppliers or contractors". The prescribed limit is all contracts exceeding Rs. 10million (Approx USD 35000).

Preventing and fighting corrupt practices in climate projects funded by public sector programs, multilateral and bilateral donors has long been a priority as well as ensuring efficiency and effectiveness in public contracting. It's a way to save taxpayers' money and make sure projects run smoothly because the goal is to guarantee all spending on public contracting is free from corruption.

Transparency International Pakistan's application of Integrity Pact approach show's a clear potential of the Integrity Pact in involving ordinary citizens and civil society organizations to play an important role in monitoring both the allocation of funds for

projects and the way that money is spent. In doing so it fosters public demand for accountability and bring costs savings because of improved competition. However, at the same time, for Integrity Pact to be effective, it needs to provide a clear incentive for compliance.

This requires:

- The IP agreement should be mandatory to be signed by all the bidders,
- Include anti-bribery pledges,
- Require bidders to have no-bribery anti-corruption compliance programmes in place.
- In case of Pakistan, IP text also spells out sanctions for failure to comply, including denial or cancellation of the contract, liability for damages, forfeiture of the bid security, and debarment from future public contracts.

Case Study: Greater Karachi Water Supply Scheme (KIII Project) Integrity Pact

In 2011, an Integrity Pact, with a formal no-bribery commitment, was signed by KWSB, consultant bidders and TI Pakistan. It resulted in a successful bid of Rs 62 million (\$1.04m) against the reserved fees of Rs 249m (\$4.2m). The project adopted the *least cost selection method*. The open bidding process was monitored by Transparency International-Pakistan.

Given below is a summary of the results as officially reported by the project's Designated Consultants and the success achieved through the Implementation of the Integrity Pact in the Procurement Procedures for award of the Consultancy and Construction Contracts.

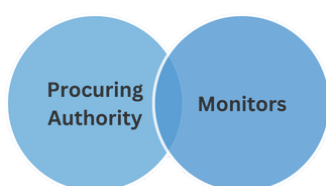
Total Savings in Consultancy and Construction Contracts due to Transparent Procurement in the Greater Karachi Water Supply Scheme, Phase-V, Stage-II, 2nd 100 MGD, K-III Project.

Nature of Assignment	GoP Approved Estimated Cost	Contract Award Cost	Saving
Design & Supervision Consultants	249 Million	62 Million	187 Million
Construction Contracts	5285 Million	4448 Million	837 Million
Total	5534 Million	4510 Million	1024 Million

The net saving of Rs 1.024 Billion out of a total estimated cost of Rs 5.534 Billion is solely due to the implementation of Transparency in the procedures adopted for award of the contracts. It has also achieved at the same time a more efficient allocation of resources through increased competition, higher quality procurement and budgetary savings for not only the government but also ultimately for the taxpayers.

The TI Pakistan Experience confirms that IP allows procurement to be based on Standard Bidding Documents acceptable to International Standards, and generates healthy Market Competition and Contract is awarded to the most experienced, competent and lowest responsive evaluated bidder in the shortest possible time.

The potential of Integrity Pact approach in climate projects is significant which can be utilized with the participation of civil society on the model below:



The procuring public authority concludes a contract with Monitors (one or several independent expert sector specialists) who may be suggested and/or recommended by a Civil Society Organization or selected after a public competition. The contract must stipulates for the Monitors:

- To be totally independent of the Authority, and not bound by their directives, even if financed by the procuring authority;
- To be given access to all bidding- and contract-related meetings and documents for screening and verification;
- To supervise the whole bidding as well as contractor selection process and contract implementation (especially change orders as they often used by the contractor to recover its profit and fund bribes);
- To report immediately about any indications of wrongdoing, in order to allow the other party to fix the situation.

The Monitors' main task is the detection and follow-up of 'red flags', i.e. problems that require special attention. Rather than taking a punitive approach to irregularities detected, the Monitors first constructively look for means for remediation.

Accountability & Transparency Mechanisms

Most countries that have managed to improve governance integrity overtime have done so

through a combination of strengthening Accountability Institutions, and increasing stakeholder participation and public engagement. These improvements have been brought in for increasing budgetary and governance performance overall and not just for climate governance.

An increasingly popular method is producing 'Green budget statements' or 'Citizen's budget' alongside Finance Ministry's annual budget statements. These statements make use of CBT to present summary of climate investments, and invite civil society feedback, which in turn can inform the incoming year's budget, specifically, climate spending.

Separately, as with the example of Bangladesh earlier, Climate spending reports are also presented to the legislature for representatives to review. Legislators who form climate-relevant or public accountability committees are able to scrutinize spending, assess trends, and question leakages or inefficiencies.

At the project level, Result-based M&E system is being adopted, which embeds a core group of qualitative and quantitative climate-related indicators on climate-relevant interventions, as well as guidelines on how to use them. It streamlines evaluations, and promote consistency and comparability. The system provides real time impact evaluation, consequentially, producing valuable early insights on progress and facilitating corrections during project implementation.

Over time it results in more accurate assessments of the effectiveness of climate interventions. System can also have a mechanism of internal and external information-sharing to promote faster learning and greater accountability.

Major investments in mitigation and adaptation projects are channeled through public procurement. Improving the quality of available information on climate finance will enhance the oversight role of civil society and citizens. The Pakistan Public Procurement

Regulatory Authority Rules 20024, Rule 47 mandates the procuring agencies for the following:

PPRA Rule 47 – Public Access and Transparency:

As soon as a contract has been awarded the procuring agency shall make all documents related to the evaluation of the bid and award of contract public;

Provided that where the disclosure of any information related to the award of a contract is of propriety nature of where the procuring agency is convinced that such disclosure shall be against the public interest, it can withhold only such information from public disclosure subject to the prior approval of the Authority.

PPRA Rule 47 provides a framework for enhancing the role of citizen's and civil society in the independent monitoring of PPRA Rules 2004 through the disclosure of contract information along with Bill of Quantities (BOQ) information on the PPRA Authority Website. However, the implementation remains weak. It is imperative to ensure full transparency in climate finance flows, allocation, procurement and distribution process, through a national tracking system accessible to citizens and civil society. A robust system of accounting and oversight may consist of the following:

- A national tracking system prepared by the Federal Ministry of Climate and Provincial Climate Departments under Climate Finance Units. These tracking systems must contain all information from all stakeholders in order to contribute to coordinating, monitoring and managing the overall climate action.
- The national tracking system should show the funding mechanism, preferably on budget, and the contribution of multi-donor funds set up for the disaster and the actual amount of funds used must be monitored.
- The system should contain information comprehensive enough to respond to government/donor exigencies yet simple enough to be accessible by affected communities.

At the same time, ensuring appropriate mechanisms and capacity to capture complaints and enforce anti-corruption measures is also of vital importance. Currently, accessible grievance procedures, including corruption reporting channels and protection for whistleblowers and witnesses is missing from the existing climate governance frameworks, and should be provided in the context of climate finance utilization.

The National Disaster Management Authority (NDMA) and the Provincial Disaster Management Authorities (PDMA) establish a Complaint Hotline where complaints can be reported on a toll-free telephone number, web, email, and fax or by mail, and handled effectively and the use of social media, SMS and other technology should be encouraged, opening up effective new methods of project evaluation and corruption detection.

Lastly, Supreme Auditing Institutions (SAIs) in various countries are being upskilled to cater to auditing climate spending appropriately. Beyond increasing transparency, the capacity of auditors and accountability bodies is developed so reporting itself is improved, as these reports add an additional check on administrators, and form as the primary evidence in case any corrective actions are required.

This also includes ensuring that the effective internal control and external auditing (including real time and field audits) should be complemented by community-led approaches, such as people's audits, that reinforce accountability towards affected people. District Disaster Management Authorities (DDMAs) and the Local government need to be empowered to ensure that affected communities are provided with accessible and important information about relief and reconstruction efforts as well as about the relief and compensation benefits they are entitled to. Appropriate formats and local languages should be used to ensure ease of access by such communities.

Scoring Checklist for Improving Climate Budgetary Performance

Based on the above-mentioned benchmark and various practices, one proposed method of improving climate spending is to ensure it undergoes through pre- and post-assessments. As part of this analysis, a 'scoring checklist' has been developed, which includes focus on improved PFM as well as governance integrity. Furthermore, this approach incorporates a 'learning curve' element that can enable the government to improve climate governance integrity over time.

This approach entails the following:

- Scoring must be made mandatory for any expenditure greater than PKR 500 million.
- Scoring criteria may be divided into three categories: Poor (-1), Satisfactory (0), and Good (1).
- Scoring checklist can be used by planners to prepare relevant documentation and analyses.
- Scoring gives highest priority to Project proposal stage, while inclusion of Climate is necessary at Planning stage, and Project integrity can be ensured by Climate-relevant Auditing & Oversight.
- Scoring can also be used to reject projects if they do not appropriately include climate-responsible planning.
- In the future, a scoring cutoff can be included to approve/reject projects, such as rejecting projects which fail to score 50% of total/60% in one of the Key Areas.

To illustrate the use of such a checklist, we take the example of a PC-I developed in 2014 for Agriculture sector scheme in Punjab. The Punjab government proposed to establish the Punjab Bioenergy Institute at the University of Agriculture Faisalabad at an estimated cost of PKR 535 million.⁴² Assuming that climate is integrated in Budgetary & Fiscal Plans, this PC-I would score highly in Project Design, as it promotes renewable energy and is well aligned with NDCs. Under a Climate Benefit Analysis and Carbon Assessment, it would also score well as it offsets Carbon, generates Green jobs, and reduces reliance on fossil fuels.

However, it may not score well in terms of Control & Audit, as existing practices in do not adequately seek public participation, and post-implementation oversight does not include climate-benefit metrics. Overall, this project would receive a go ahead scoring greater than 50 percent.

In contrast, Punjab government also approved a PC-I for development of small Coal power stations in Lahore.⁴³ This project, within the Energy sector, would score very poorly on all metrics. Fossil-fuel run small power stations are both inefficient and highly polluting.

In the presence of alternative options available, such as Solar power, to handle peak energy loads, establishing coal power stations would not be as economically beneficial. It will also score negative points in Climate Benefit Analysis and Carbon Assessment. Such a project will fail the scoring checklist, and planners can refuse to fund and implement it.

Scoring Checklist for Proposed Climate Spending			
Area	Key Metric	Description	Scoring
Budgetary & Fiscal Plans	Established/Regulated PFM	An established PFM system that is in use and government under a legal policy framework	
	Project Planning/Cycle Guidelines	Project planning occurs in a standardized process, where Climate has been included	
	Climate in MTBF & Sectoral plans	Medium-term Budgetary Goals, where climate has been included, and Sectoral planning prioritizes Climate	
	Climate Finance Performance Review	Annual review of Climate Finance spending, where past-year performance is used as feedback	
	Macro-economic Climate Risk Modelling	Financial risks include Climate Risk analysis at the central-planning level	
Project Design	Alignment with NDCs	Proposed project follows goals as committed under NDCs	
	Contribution to Adaptation or Mitigation	Proposed project fulfils A/M goals, taking guidance from NDCs	
	Alignment with Sectoral Plans	Proposed project follows pre-set sectoral goals, such as under Water, Agriculture, Transportation	
	Environmental CBA	Proposed project plan includes environmental cost-benefit analysis, which shows reductions in climate risks	
	Procurement Policy & Plan	Proposed project follows established Government procurement policy and discourages external policies, which appropriately prioritizes sustainability	
	Climate Tagging	Proposed project is tagged under Climate initiatives for future budgetary performance review	
Accounting & Reporting	Standards	Accounting follows established standards	
	EIA or ESIA	Project implementation is linked with approval of EIA or ESIA	
	Carbon Assessment	Project carbon emissions or offset are assessed	
	Monitoring & Evaluation	Project M&E includes Climate/Environment	
	Project Sustainability	Procurement of goods under the project follows practices for reduce/reuse/recycle	
Control & Audit	Transparency	Approved Project plans are available to public, including Project EIA/ESIAs, implementation plans, and relevant Analyses	
	Participation	Project approval is signed off after Stakeholder consultations	
	Expert Guidance	Where necessary Auditor General, PAC, other Accountability bodies bring in external experts to guide auditing process on climate achievement	
	Oversight	Project audit is presented to PAC, which includes Climate-responsible metrics in oversight	
Other	Carbon cost	A shadow cost of carbon is included, where carbon emissions or offsets are analyzed	

Table 11 Sample Scoring Checklist

Lessons and Recommendations

On Strengthening Climate Governance Integrity and Inclusiveness

Pakistan's vulnerability to the climate crisis has been made apparent over the past two decades, with the country suffering significant human and financial losses due to climate-induced disasters. Its ability to build resilience depends on the effectiveness of the country's climate governance framework as well as raising appropriate climate financing. As the evidence and data illustrates, currently, the country considerably lags in both regards.

Integrating climate fully within planning and policies is a major task for countries worldwide, even for those with substantially more resources. However, as illustrated with comparisons to both the benchmark scenario as well as regional peers, Pakistan needs to make large and swift leaps. Based on the systems and comparative analysis, there are some key takeaways that can guide improvements in climate governance integrity and catalyse efforts to develop climate resilience.

(1) Climate Change institutions as set under the Climate Change Act need to be operationalized and empowered

Climate change policies cannot be implemented in 'bits and pieces' and major parts of the governance framework should not be circumvented if the government wants to be successful. The absence of the Climate Change Authority essentially makes the Framework for Implementation toothless, and also hinders the creation of cadre of public officials who will be trained to handle matters pertaining to climate change. The experience of other authorities suggest that even weak

offices can be effective as they hold institutional memory and dedicated resources ready to be deployed. Therefore, the Climate Change institutions as set under the Climate Change Act need to be operationalized and empowered, and be the primary drivers of integrating climate in governance, both horizontally and vertically, across the federal and provincial governments.

(2) A 'whole of society' approach which invites public and expert participation in climate planning and decision making must be adopted

Policy-design needs to inculcate a 'whole of society' approach which invites public and expert participation each time a new iteration is to be devised, thereby creating a buy-in and improve chances of successful implementation. Public participation can also reduce skepticism about governance performance, as a lack of transparency can lead to incorrect or anecdotal information being circulated. Climate policy implementation should also follow a 'whole of government' approach as the issues and solution are cross-cutting, and require inter-ministerial and inter-departmental collaboration and coordination.

(3) Integrate Transparency & Climate perspective in project designs including at planning and budgeting level

Improvements must be made at the project stage level, where planning & budgeting integrate climate, project design is evaluated

based on climate metrics, and integrity and transparency mechanisms are expanded to ensure that the limited climate finance available is spent in the right sectors and on the most effective projects. This can be achieved by using appropriate set of tools for climate analysis and adopting a framework for performance review to imbibe transparency into the system.

This includes evidence generation, climate budget reports, public dissemination, and stakeholder consultations. Further, a uniform approach to reporting must be established to report climate spending, in order to encourage comparability, reward better performance, and create a learning feedback loop across the departments.

In order to guide transformations to the existing system, the government can set benchmarks and take inspiration from peer states, which are experimenting with approaches for improving climate governance integrity, including standardized checklists for project design and approval, climate impact assessments, new results-based monitoring & evaluation, and legally mandated green budgetary reporting.

(4) Capacity Building of key auditing and reporting institutions, including corruption watchdogs

Accountability institutions must undergo capacity building, which equips them with the climate-relevant expertise required to audit and report, or investigate climate finance spending, in order to understand that climate benefits have to be accounted for alongside financial reporting.

The inverse is equally important, in case projects that may have both misappropriations as well as climate damages. Such accounting and modelling is often quite technical, and inter-agency collaboration, such as receiving assistance from State Bank of Pakistan (SBP) and the MoCCEC, should be encouraged.

(5) Policy lag between national and provincial Climate policies and lack of institutional capacity

There is a large lag between National and Provincial policy-making. In some cases (Punjab and Baluchistan), policies have still not been approved, nor the implementation action plans, without which sectoral adaptation and mitigation is not possible. The Federal Government must establish protocols and provide support for quick policy-making, as limited capacity in provincial departments could potentially hinder NDC targets. Additionally, for the country's nascent climate governance structure, there is an additional need to assist in building institutional capacity to cater to the high standards of 'accreditation' required by international climate finance mechanism. Currently only 2 entities from Pakistan are accredited with the Green Climate Fund (GCF) – with low visibility and accessibility at such platforms, Pakistan's ability to seek climate finance is further circumscribed.

(6) Enhance climate budgetary allocations in proportionate to the scale of climate change crisis

Direct allocations from respective ministries at federal and provincial levels towards climate objectives remains limited. In the centre, the allocation as part of the total budget outlay on average is around 1 percent, while in Punjab it is below 1 percent and in KP below 0.5 percent. As climate impacts increase, the role of provinces in leading adaptation and mitigation scheme will be crucial. However, provinces allocations remain lower than the Federal government's towards climate change.

(7) Ensuring compliance with Public Procuring Regulatory Authority (PPRA) Rules to enhance transparency of climate projects.

Climate responsible procurement in most countries is being voluntarily practiced as a

means of encouraging the use of least environmentally harmful materials while gaining maximum utility. In Pakistan, procurement management is complicated by the existence of parallel policy guidelines, such as, within donor-led or donor-funded projects.

These differentiating approaches means that the same good may be arriving at a higher cost because of certain policy guidelines. It is, therefore, important that local procurement rules be applied which have already been designed to cater to the local context including compliance with transparency provisions such as Integrity Pact and Access to Information. Lastly, within procurement rules, new guidelines based on environmental impact should be inculcated, to encourage sustainability.

(8) Establish open database on Climate Finance

A national tracking system may be prepared by the Federal Ministry of Climate and Provincial Climate Departments under Climate Finance Units. The tracking system must contain all information from all stakeholders in order to contribute to co-coordinating, monitoring and managing the overall climate action.

(9) Enhance climate governance integrity using global best practices

In order to move the needle, it would be useful that the government also establishes and commits to a benchmark for the future trajectory of climate governance and its integrity. Regional peers as well as developed states offer useful precedents in this regard, where both political commitment goes hand-in-hand with stated policy objectives. Pakistan would benefit greatly if the existing governance framework is fully operationalized and receives backing from both the Parliament and the Cabinet. Such high-level agenda setting and political commitment would increase trust in the system, and potentially open up more access to climate finance.

(10) Ensuring appropriate mechanisms and capacity to capture complaints and enforce anti-corruption measures is also of vital importance.

Ensuring appropriate mechanisms and capacity to capture complaints and enforce anti-corruption measures is also of vital importance. Currently, accessible grievance procedures, including corruption reporting channels and protection for whistleblowers and witnesses is missing from the existing climate governance frameworks, and should be provided in the context of climate finance utilisation. The National Disaster Management Authority (NDMA) and the Provincial Disaster Management Authorities (PDMA) establish a Complaint Hotline where complaints can be reported on a toll-free telephone number, web, email, and fax or by mail, and handled effectively and the use of social media, SMS and other technology should be encouraged, opening up effective new methods of project evaluation and corruption detection.

To conclude, Pakistan has a major opportunity, to build resilience against the twin macro crises that are currently affecting it: one, impact the economic, and the other, environment and climate. Improving climate governance will help it reduce risks, improve lives of communities in the country, and widen sources of government revenue. Climate and economy are also deeply interlinked, as was seen by the impact of floods, which added to inflationary pressures. Therefore, the possible gains of improving climate governance integrity are significant, and implementing learnings from key lessons can help guide Pakistan be better prepared in the decades to come.

ENDNOTES

- [1] Pakistan's climate action: a fact sheet, Sustainable Development Policy Institute (https://sdpi.org/pakistans-climate-action-a-fact-sheet-/news_detail)
- [2] How G77 group of developing nations helped advance climate justice cause under Pakistan's presidency?, Arab News (<https://www.arabnews.pk/node/2223146/pakistan>)
- [3] UNDP Climate Promise, Pakistan (<https://climatepromise.undp.org/what-we-do/where-we-work/pakistan>)
- [4] Nationally Determined Contributions Registry, United Nations Framework Convention for Climate Change (<https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Pakistan%20First/Pakistan%20Updated%20NDC%202021.pdf>)
- [5] Institutional policy and reforms, Ministry of Climate Change, Government of Pakistan (<https://mocc.gov.pk/Sitelmage/Misc/files/Chapter-08.pdf>)
- [6] Access to justice: Strengthening legal awareness and the delivery of legal services in Sindh, Legal Aid Society (<https://las.org.pk/wp-content/uploads/2018/09/Rights-What-Rights-September-02-2016Final-for-Printing-with-Cover-Page.pdf>)
- [7] Ms. Shehla Zia v. WAPDA, PLD 1994 SC 693, Caselaw Database, ESCR-Net (<https://www.escr-net.org/caselaw/2015/ms-shehla-zia-v-wapda-pld-1994-sc-693>)
- [8] Ms. Shehla Zia v. WAPDA, PLD 1994 SC 693 case transcript, ESCR-Net (https://www.escr-net.org/sites/default/files/caselaw/zia_v.wapda_transcript.pdf)
- [9] Microsoft Word - Final LUMS Law Journal 3Apr19.doc
- [10] Environmental Protection Act, The Gazette of Pakistan (<https://na.gov.pk/uploads/documents/Pakistan=Environmental-Protection-Act-1997.pdf>)
- [11] Pakistan Climate Change Act – 2017, Climate Change Laws of the World (https://climate-laws.org/document/pakistan-climate-change-act-2017_3453)
- [12] The Punjab Environmental Protection Act, 1997, Environmental Protection Department - Government of Punjab (https://epd.punjab.gov.pk/system/files/pepa_2012_0.pdf)
- [13] The Khyber Pakhtunkhwa Environmental Protection Act, 2014, Government of KP (https://kpcode.kp.gov.pk/uploads/THE_KHYBER_PAKHTUNKHWA_ENVIRONMENTAL_PROTECTION_ACT_2014.pdf)
- [14] The Sindh Environmental Protection Act, 2014, Provincial Assembly - Government of Sindh (<http://www.pas.gov.pk/uploads/acts/Sindh%20Act%20No.VIII%20of%202014.pdf>)
- [15] The Balochistan Environment Protection Act, 2012, Provincial Assembly - Government of Balochistan (https://pabalochistan.gov.pk/pab/pab/tables/alldocuments/actdocx/2021-03-30_08:36:38_7dd9a.pdf)
- [16] Nationally Appropriate Mitigation Actions Database (<https://nama-database.org/index.php/Pakistan>)

- [17] National climate change policy 2012, Ministry of Climate Change - Government of Pakistan (http://www.gcisc.org.pk/National_Climate_Change_Policy_2012.pdf)
- [18] National climate change policy 2021, Ministry of Climate Change - Government of Pakistan (<https://mocc.gov.pk/SiteImage/Policy/NCCP%20Report.pdf>)
- [19] Framework for implementation of climate change policy (2014-2030), Climate Change Division - Government of Pakistan (<http://www.gcisc.org.pk/Framework%20for%20Implementation%20of%20CC%20Policy.pdf>)
- [20] National Adaptation Plan – Pakistan 2023, Ministry of Climate Change and Environmental Co-ordination, Government of Pakistan (https://unfccc.int/sites/default/files/resource/National_Adaptation_Plan_Pakistan.pdf)
- [21] Punjab climate change policy 2017, EPD - Government of Punjab (https://epd.punjab.gov.pk/system/files/PCCP%20Draft%20%28internatl%29_0.pdf)
- [22] Punjab Provincial Climate Change Action Plan 2021, Ministry of Climate Change - Government of Pakistan (<https://epd.punjab.gov.pk/system/files/Final%20PUNJAB%20ACTION%20PLAN.pdf>)
- [23] GB Climate Change Strategy and Action Plan 2017, Gilgit-Baltistan Environmental Protection Agency (http://gbepa.gog.pk/files/GBEPA_CCS_and_AP_2018-07-31.pdf)
- [24] AJ&K Climate Change Policy 2017, Planning and Development Department, Government of AJ&K (<https://pndajk.gov.pk/uploadfiles/downloads/CC%20AJK%20Policy%202017.pdf>)
- [25] Khyber Pakhtunkhwa Climate Change Policy 2022, Environmental Protection Agency – Government of KP (<https://epakp.gov.pk/wp-content/uploads/2022/09/Khyber-Pakhtunkhwa-Climate-Change-Policy-2022.pdf>)
- [26] Khyber Pakhtunkhwa Climate Change Action Plan 2022, Environmental Protection Agency – Government of KP (<https://epakp.gov.pk/wp-content/uploads/2022/09/Khyber-Pakhtunkhwa-Climate-Change-Action-Plan-August-2022-English..pdf>)
- [27] Climate Change Policy 2022, Government of Sindh (https://docc.sindh.gov.pk/files/DoCC/Sindh%20Climate%20Change%20Policy_June%202022.pdf)
- [28] The National Disaster Management Act 2010, Ministry of Law & Justice, Government of Pakistan (<https://pakistancode.gov.pk/pdf/files/administrator/ff82dc9de8f78899b91a3be45e90b1cb.pdf>)
- [29] UNDP Climate Promise, Pakistan (<https://climatepromise.undp.org/what-we-do/where-we-work/pakistan>)
- [30] Pakistan unveils National Climate Finance Strategy, Ministry of Planning, Development & Special Initiatives, Government of Pakistan (https://www.pc.gov.pk/web/press/get_press/1107)
- [31] Interactive: How climate finance ‘flows’ around the world, Carbon Brief (<https://www.carbonbrief.org/interactive-how-climate-finance-flows-around-the-world/>)
- [32] \$700m pledged to loss and damage fund at Cop28 covers less than 0.2% needed, The Guardian (<https://www.theguardian.com/environment/2023/dec/06/700m-pledged-to-loss-and-damage-fund-cop28-covers-less-than-02-percent-needed>)
- [33] Country Climate and Development Report - Pakistan 2022, The World Bank (<https://openknowledge.worldbank.org/server/api/core/bitstreams/2d1af64a-8d35-5946-a047-17dc143797ad/content>)
- [34] WB terms Punjab's \$200m-worth project 'moderately unsatisfactory', The Express Tribune (<https://tribune.com.pk/story/2134659/green-project-termed-moderately-unsatisfactory>)

[35] World Bank closes \$200m locust project, DAWN (<https://www.dawn.com/news/1807645>)

[36] Accredited Entities – Green Climate Fund ([https://www.greenclimate.fund/about/partners/ae?f\[\]=field_subtype:226](https://www.greenclimate.fund/about/partners/ae?f[]=field_subtype:226))

[37] Country Climate and Development Report - Pakistan 2022, The World Bank (<https://openknowledge.worldbank.org/server/api/core/bitstreams/8aa74fcb-8b70-5e1f-87b9-478674c1d6b1/content>)

[38] National Accountability Ordinance, NAB – Government of Pakistan (<https://nab.gov.pk/Downloads/nao.asp>)

[39] What is climate change legislation?, The London School of Economics & Political Science (<https://www.lse.ac.uk/granthaminstitute/explainers/what-is-climate-change-legislation/>)

[40] The Climate-Public Investment Management Assessment (C-PIMA), IMF Infrastructure Governance (<https://infrastructuregovern.imf.org/content/PIMA/Home/PimaTool/C-PIMA.html>)

[41] Think Tank Says Pakistan Debt Unsustainable - Urges Climate Swaps, Bloomberg (<https://www.bloomberg.com/news/articles/2024-02-18/think-tank-says-pakistan-debt-unsustainable-urges-climate-swaps>)

[42] PC-I for Establishment of Punjab Bioenergy Institute (PBI) at University of Agriculture -Faisalabad, Planning and Development Board, Government of Punjab (<https://pnd.punjab.gov.pk/system/files/PC-1%20Establishment%20of%20Punjab%20Bioenergy%20Institute%20%28PBI%29%20at%20UAF.pdf>)

[43] PC-I for 2x 55MW Small Coal plant in Sunder Industrial Estate Lahore, Planning and Development Board, Government of Punjab (<https://pnd.punjab.gov.pk/system/files/Energy%29%202x55%20MW%20Coal%20Fired%20Power%20Plant%20at%20Sunder%20Industrial%20Estate.rar>)

