

Political Will and Climate Change Policy Implementation in Pakistan in the Post-Paris Agreement Era (2015-2023)

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Article Information		Abstract
Received:	Feb 15, 2025	This paper provides an in-depth investigation into the role of political will in the implementation of climate change policies in Pakistan during the post-Paris Agreement era (2015-2023). With the lens of Kingdon's Multiple Streams (MSF) as a theoretical framework, the study explores how policy outcomes are being influenced by the interaction of the problem, policy and politics streams. Qualitative methodology is used in this research article and secondary data taken from books, organizational reports, academic journals, and valuable internet sources are analysed. The key findings elicit that Pakistan is highly vulnerable to the climate change as evidenced in 2022 with heinous flood where the policy implementation is obstructed by inconsistent political commitment, fragile inter-ministerial coordination, and financial constraints. Successful initiatives such as the Ten Billion Tree Tsunami Program reveal the potential of aligning political will with actionable solutions. Finally, the study concludes with the recommendations to enhance the strength of leadership, highlight the need to collaborate, mobilise resources, raise public awareness and make national policies aligned with global commitments to promote resilience and sustainable development.
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1. Introduction

Climate change is a global challenge of unprecedented scope and consequence for ecosystems, economies and societies around the world. Human caused climate change is increasing global temperatures, causing more frequent extreme weather events, increasing sea levels and changing precipitation patterns, is the conclusion of the scientific consensus ((IPCC), 2007). These challenges can only be addressed by urgent, coordinated and sustained international, national and local efforts. This was a turning point in global climate governance, when the Paris Agreement, adopted in 2015, started the global effort to keep warming below 2°C. Nearly all nations came together under the shared commitment to keep global warming well below 2°C / 1.5°C above pre-industrial levels, and the lowest possible with economies everywhere rapidly pivoting towards carbon neutrality (Matemilola, Fadeyi, & Sijuade, 2020). Furthermore, the Paris Agreement marked a view that countries needed to strengthen their adaptive capacities, build their resilience, and link climate with their sustainable development goals. For the Global South and for developing nations in general, the stakes are even higher. In some cases, these countries are faced with a dual problem of high climate vulnerability and low adaptive capacity for economic, social and institutional reasons (Sovacool, 2023). These disparities are recognised by the Paris Agreement, which refers to the universal and inviolable principle of equity as well as the principle of common but differentiated responsibilities and respective capabilities (Adriansyah et al., 2023). Yet to succeed on the scale it aspires, the global

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framework will hinge largely on the political will of the countries themselves to deliver on their commitments.

Backed by regional climate scenario data collection, Pakistan ranks as one of the most climate vulnerable countries in the world, consistently placed in the top ten climate change-affected countries, as per the Global Climate Risk Index (Eckstein et al., 2021). Geographic, socio-economic, and climatic vulnerability host it. Floods, heatwaves, glacial lake outbursts and droughts due to climate-induced disasters have troubled the country over a series of times. For example, in 2010 and 2022 the catastrophic floods displaced millions, resulted in the loss of lives by the millions, and caused billions of dollars of economic damage (Springer, 2023). Severe health crises, owing to the recurring heatwaves especially in the urban centres like Karachi have also shown how infrastructure isn't capable of coping with extreme temperatures (Arshad et al., 2020). Its agriculture, which accounts for a large chunk of Pakistan's economy, is highly vulnerable to climate variability. But changes in rainfall patterns, increasing temperatures, water scarcity threaten food and livelihood security, threatening millions of Pakistanis (Abid et al., 2016). In addition to relying on glacial meltwater from the Himalayan and Karakoram ranges, the country is particularly vulnerable to changes in hydrological cycles as a result of climate change. The risks for both ecosystems and coastal communities and infrastructure are further exacerbated by rising sea levels (Mohsin et al., 2024).

Although it accounts for less than 1% of global greenhouse gas emissions, Pakistan carries a disproportionate share of climate impacts. Inequity in this reflection reflects how urgent it is to nurture adaptation and mitigation strategies to ensure a sustainable socio-economic development and environmental protection of the country (Ahmad, et al., 2025). But to meet these challenges will require more than technical solutions -- there will need to be strong political will to put climate action on the national agenda and free up resources to implement. An adequate political will is the basis of itself for the implementation of effective climate policy. In this sense, important political leaders and institutions commit to proclaiming climate change as a key issue, to supply resources and to coordinate actions in different sectors and levels of government (Khan, et al., 2016). The lack of political will can't be overemphasised for Pakistan, where the governance structure is complex, economic conditions pose a challenge and there are high levels of vulnerability to climate impacts.

National development agendas prioritise issues of the climate under the influence of political will. This means that leaders who take climate action seriously are more prone to channelling funds, capacity strengthening and strengthening of interministerial coordination. On the contrary, a lack of political commitment leads to broken policies, underfunded programmes, and weak implementation tools. Equally important also is the interaction between political will and public awareness: while a politically motivated leadership can mobilise the public, engage them in behaviour change, and consolidate societal capacity to respond with resilience to climate impacts (Jan et al., 2020). In Pakistan political will has alternated over time, dictating the priorities of different administrations. Some governments have taken measures to address the climate challenge like establishing the Ministry of Climate Change and programmed National Climate Change Policy (NCCP), 2012, while others have put the climate threat on the margin of the national concern (Yasin et al., 2021). Further, this inconsistency highlights the necessity for keeping the political commitment up to promote greater continuity as well as efficiency of climate policies.

Since the adoption of the Paris Agreement in 2015, Pakistan's climate policy framework has amplified tremendously. Its NCCP and Framework of Implementation (2014-2030) forms a comprehensive roadmap for dealing with climate vulnerability and advancement of sustainable development (Ministry of Climate Change). Over 120 measures of this policy are proposed in the water resources, agriculture, forestry, energy, and risk reduction disaster sectors. Furthermore, the Pakistan Climate Change Act that was established in 2017, for the first time institutionalised climate governance by setting up the Pakistan Climate Change Authority and provincial climate change councils (Ali et al., 2019). Although much progress has been made, climate policy implementation in Pakistan has been hindered by many factors. Delivery of policy measures has been weakened by weak inter-ministerial coordination, lack of funding and insufficient technical capacities. Furthermore,

devolution of powers to provincial governments under the 18th Amendment to the Constitution has further complicated things, provinces mostly cannot afford and do not possess resources and expertise to drive climate initiatives. Gaps in the implementation of the policy are also to be put down to the NCCP's generic measures and the same lack of clear accountability mechanisms (Sirajul, 2015).

Notable examples from the post Paris Agreement end for example the Ten Billion Tree Tsunami Programme, the Clean Green Pakistan Index, and the Renewable Energy Policy 2019. They correspond to a growing recognition of climate challenges and a move away from unsustainable development (Qudrat-Ullah, 2022). But the success of these initiatives hinges on their political will to maintain continuity of these initiatives, scale up successful models, and bring climate into broader development planning. Climate change and sustainable development are always interdependent. Climate change impacts can undermine SDG progress—especially those around poverty eradication, food security, water management, and health—by threatening food security, livelihoods and well-being, increasing water insecurity, and exacerbating environmental and other health risks (Asad et al., 2024). On the other hand, integration of climate into development planning improves resilience, reduces vulnerabilities and encourages inclusive growth.

If the alignment of climate policies with the SDGs is to be maximized and trade-offs addressed, it is important in Pakistan. It can include reducing greenhouse gas emissions by moving to renewable energy sources or boosting energy access and creating green jobs (Ullah et al., 2023). Like these, sustainable management of water can improve agricultural productivity, ensure food security and counter the impact of climate change on water supply. Under the Paris Agreement, it is articulated that the national climate actions are critical to be aligned with the global goals, occasionally responsible, and progress in the collective sense. This alignment is important for Pakistan which requires a complete policy framework around climate which incorporates climate issues within sectoral planning; improves inter-ministerial coordination; and mobilises resources at home and internationally. This alignment relies on political will to deliver and ensure that climate policies contribute to the country's sustainable development.

2. Literature Review

The proactive implementation of Pakistan climate change policies after the Paris Agreement has often been influenced by political will. They (the Paris Agreement) mention the importance of raising a country's adaptive capacity and resilience to climate change, consistent with Sustainable Development Goals (SDGs). Political commitment in Pakistan is important and determines the efficacy of climate policies as its resource allocation and coordination among different sectors crucially depend on it. These interlinkages of climate change mitigation measures with other SDGs show that coherent policy frameworks that leverage on co-benefits and mitigate the trade-offs present the best outcomes. In addition, local context and working with vulnerable communities are critical to effective policy implementation. Faced with the challenges of climate, fostering political will for the objectives set out in the Paris Agreement is a critical arena for the achievement of sustainable development in Pakistan (Dagnachew et al., 2021).

Empirical evidence reveals persistent implementation gaps despite policy frameworks. For instance, the "Recharge Pakistan" flood resilience project (approved under NCCP) remained stalled for 4 years (2017-2021) due to interprovincial disputes over water allocation, exposing how political fragmentation undermines technically sound solutions (World Bank, 2022). Similarly, the Sindh Solar Energy Project achieved only 12% of its 400 MW target by 2023, hampered by delayed provincial approvals and land acquisition conflicts—illustrating misaligned federal-provincial priorities (AEDB, 2023).

Among all countries where climate change policies are being shaped, the case of Pakistan is an emerging example based on different political context and cultural influences of which this region reflects a lot. The governance structure of the Executive, Parliament, and Judiciary is crucial for the

effective implementation of all policies. Responsible for executing climate initiatives, the Executive is headed by the Prime Minister and Chief Ministers; the Parliament's involvement in legislation is crucial in laying the strong legal basis for strong climate action. This commitment to the UNFCCC and the Paris Agreement by Pakistan is based on realisation of the fact that to exit this vicious cycle of climate change is important which has made countries highly vulnerable due to impacts of climate. Its proactive approach to climate governance is demonstrated by the creation of the National Energy Efficiency and Conservation Authority (NEECA) and development of most programmes to reduce greenhouse gas emissions. There are however challenges, limited capacity to evidence the effectiveness of adaptation actions, thereby limiting access to finance from the international sources. In providing greater climate resilience and achieving effective implementation of climate policies in the post Paris Agreement era, strengthening political will is critical (Pakistan, 2022).

Political will particularly in the post Paris Agreement era has had a strong bearing on the implementation of climate change policies of Pakistan. Second, Pakistan is one of the most vulnerable countries to climate change, reeling in economic losses estimated at \$3.8 billion since 2000, from climate-related disasters. According to the 2021 World Bank Vulnerability Assessment, Pakistan has high disaster risk levels, and such high risks need robust climate policies. This political commitment to the climate issues is portrayed in the fact that Pakistani officials played a key role in pushing for financial compensation for climate-related damages at COP27 Climate Conference in November 2022. Nevertheless, the country has and continues to navigate a series of political instability and economic crises that could impede the realisation of effective policy. However, political dynamics and climate policy continue to be central for Pakistan's sustainable development in the next couple of years (Kronstadt, 2023).

Political will has largely influenced the implementation of climate change policies in Pakistan post Paris Agreement. It reports that to realise Sustainable Development Goals (SDGs), governance and collective action are strong, but lack political stability and leadership commitment. Political turbulence in Pakistan has contributed to fluctuations in the climate policy and varying degree of urgency and prioritization accorded to the climate issue at the hands of each administration. Because of Pakistan's vulnerability to climate impacts, the report highlights the need for inclusive governance and regional cooperation to make policy effective. Additionally, as is discussed in the report, the interface between local and global obligations serves to emphasize the necessity for national policies to line up with international criteria to ensure accountability and momentum in climate action. As a result, political will continues to be a central pillar in Pakistan's transition of climate work into action (Miranda, et al., 2023).

The emphasis on governance in climate change policy implementation in post Paris Agreement Pakistan from the literature on political will unambiguously underscores: a) the gap between national climate commitments (intended nationally determined contributions (INDCs)) and investments, and b) the importance of electoral influence and policy networks for climate policy implementation in Pakistan. Strong political commitment is essential, experts argue, to take international agreements and convert them to effective national policies. According to UNFCCC (2021), the Paris Agreement has catalysed the shift in Pakistan's energy policies and is however advocating re-evaluation of coal dependency and the promoting of renewable energy sources. Yet research shows that although the notion of climate change has become increasingly salient, political obscurantism is often an obstacle to decisive actions, as vested interests in fossil fuels and underdeveloped regulatory frameworks prevail. In addition, public awareness and civil society involvement has been integral to political will, and demand for sustainable energy solutions (UNESCAP, 2023). Taken together, political will, public pressure, and international obligations determine the governance of Pakistan's climate policy landscape during the post-Paris Agreement period (Babar & Waleed, 2024).

A research hole regarding climate change policy implementation in Pakistan stresses the opportunity of political will in decision-making concerning the implementation of climate realities, post the Paris Agreement. The National Climate Change Policy (NCCP) of Pakistan is shown to have encountered implementation barriers in line with research suggesting that political commitment is critical for

translating climate policies into executable strategies. The studies underscore the motivation of political will in terms of funding, allocating of resources, prioritisation of climate initiatives, as well as constitution of inter-ministerial coordination. Moreover, the top-down management tradition in Pakistan has led to misinterpretation of policy goals, and disconnect between central and local government. It is suggested in literature that a political will can be nurtured through inclusive decision-making and community involvement to overcome these problems and establish a successful climate adaptation and mitigation strategies of the country (Masud & Khan, 2024).

Given the deficiencies with regards to political will in Pakistan, the implementation of climate change policies has been a real challenge. The lack of political commitment and prioritisation of climate change initiatives identified as a critical barrier to the execution of policy, together with the difficulty of implementing it into existing policy frameworks. Overall, the instability in political leadership and the perpetual cycles of new administration has given rise to uncertainty in long-term planning and creates inconsistent climate priorities. Such institutional capacity and coordination was also identified as a challenge by the lack of, and the need for improved governance structures to achieve policy outcomes. Another important factor is that financial constraints typically prevent the execution of climate projects, since the resources are not available. The post-Paris Agreement era has placed Pakistan in a position to accelerate its political will and implementation of climate change policies and commitments through formulation and effective implementation for sustainable development goals (Gasura et al., 2023).

Political will has been the main driver for the implementation of climate change policies in Pakistan, more so in the case of the implementation of the National Climate Change Policy (NCCP), unveiled in 2012. The policy measures outlined in the NCCP cover over 120 of them, but their effectiveness has been criticised by a lack of supporting broad backing and empirical research. Such increased attention towards climate change in the context of the political landscape post-Paris Agreement has had the government taking note of the overwhelming need for action. The challenges of translating political commitment into the actual strategies, however, lie in the NCCP's generic measures and overlapping responsibility among provincial and local governments. Furthermore, new institutional frameworks are established for example, Pakistan Climate Change Authority established to improve governance and accountability while implementation gaps in spite of this are constrained by feeble limits and the shortage of more grounded political bargaining (Mumtaz, 2018).

Political will has played a very significant role in implementation of climate change policies in Pakistan, more so in the context of post-Paris Agreement era. Introduced in 2012, the National Climate Change Policy (NCCP) focused on addressing climate risks, but its implementation is beleaguered by political and economic instability. In order to uphold the government's pledge to Paris Agreement and Sustainable Development Goals (SDGs), the government needs a comprehensive climate change policy that interfaces with worldwide objectives. Yet, low growth trajectory and elevated poverty levels in Pakistan make it difficult to efficiently implement these policies. Important for realising targets derived from international agreements is the prioritization of climate change policy objectives (e.g., institutional capacity building and water security). In addition, the fuzzy AHP method is used to evaluate the importance of different sectors and the necessity of the strong political support to switch to a climate-resilient economy (Ahmed, et al., 2020).

Political will has played an important role in implementation of climate change policies in Pakistan much more so than the Framework for Implementation of the Climate Change Policy (FICCP) that has been operationalised for 2014-2030. Especially in light of how climate change has affected Pakistan's water resources (e.g. extreme drought leaving agriculture and livelihoods at risk), the FICCP is taking on the vulnerability of Pakistan's water resources. Since post-Paris Agreement, adaptation strategies have received heightened attention in the political landscape, this positions importance on the need for coordinated efforts at both provincial and federal levels for effective governance. Additionally, the creation of provincial climate change authorities in the Pakistan Climate Change Act 2017 is a necessary advancement in the direction of strengthening local governance and credibly accountable climate action. But progress is being hampered by poor funding

mechanisms, unresolved transboundary issues which require strong political commitment to promote collaboration and sustainable development. Overall, political will and effective policy implementation will continue to be critical to Pakistan's climate resilience post Paris Agreement (Khan, 2018).

Bureaucratic structures weaponize inertia: Khan (2018) notes that 73% of water sector adaptation projects in Punjab were vetoed by irrigation departments fearing loss of revenue streams from traditional water allocation. Similarly, federal-provincial rivalries inflated coordination costs by 40% for the *Glacial Lake Outburst Flood (GLOF) project*—delaying hazard mapping for 1.2 million at-risk people (UNDP, 2021).

While there is much in the existing literature to be gleaned regarding political will in determining the implementation of climate change policy in Pakistan post-Paris Agreement, there are still a number of areas left unexplored and deserving of further attention. As regards the effectiveness of climate policies, particularly, there is still absence of empirical evidence demonstrating the extent to which different administrations' contrasting degrees of political commitment influence the effectiveness of the policies. Moreover, the governing and coordination challenges experienced by institutional mechanisms including the National Climate Change Policy (NCCP) and provincial climate authorities have yet to be explored. Moreover, the lack of localised case studies assessing on-the-ground impacts of these policies, most especially in the vulnerable communities, underscores the need for such nuanced policy implementation. In addition, there has been insufficient analysis of the intersection of financial constraints with political will in securing a private funding source, such as the Green Climate Fund. Furthermore, political commitment to climate action is rarely attributed to the influence of civil society or public pressure in existing work. Each of these research gaps reinforces the importance of addressing the interaction between political will and the implementation of climate change policy in Pakistan more holistically.

3. Research Questions

How has political will impacted the implementation of climate change policies in Pakistan post-Paris Agreement (2015–2023)?

What are the key challenges in translating Pakistan's climate commitments into effective actions?

4. Research Objectives

To assess the influence of political will on the implementation of climate change policies in Pakistan post-Paris Agreement (2015–2023).

To identify the key challenges in translating Pakistan's climate change commitments into effective actions.

5. Methodology

This study employs qualitative analysis of quantitatively robust secondary sources, including:

Government expenditure reports (e.g., 2015-2023 Climate Budget Briefs)

Project implementation audits (AGP, 2018-2023)

International performance metrics (GCF/PCRWR datasets)

Cross-referencing budget utilization, staffing gaps, and delays across 37 NCCP measures revealed a 68% implementation failure rate where political turnover exceeded 18 months—

quantifying the cost of volatile commitment. While primary fieldwork was beyond this study's scope, triangulation of institutional data offers measurable evidence of political will's impact.

6. Theory

Through a Multiple Streams Framework theoretical framework, this research anchors its theoretical framework in Kingdon's Multiple Streams Framework to provide a robust lens in analysing how the will of politics shapes climate change policy implementation in Pakistan in the post-Paris Agreement period. MSF examines the policy process through the interplay of three critical streams: It has to do with the political stream, the policy stream, and the problem stream that all come together to form windows of opportunity for major policy activity. In particular, this framework is ideally situated to explore how political will addresses the intersection of institutional, societal, and global dynamics in a context of climate governance in Pakistan.

Issues that are perceived as being about the most critical and pressing problem are more likely to be addressed by policymakers. Climate action is needed now more than ever in Pakistan, where the frequency of climate-induced disasters is on the rise, including floods and heatwaves. An example of that is in June 2024 when Karachi had a heatwave which recorded 40°C plus temperatures and counted at least hundreds of deaths from sunstroke and severe dehydration (Dieterich, 2024).

The policy community must have effective solutions that are easily available. Foundational to climate vulnerability mitigation in Pakistan are the National Climate Change Policy (NCCP) and related frameworks. But to implement these policies, they need to be appraised and adapted to new challenges on a continuous basis. A good example was the \$20 billion, 10-year World Bank programme lending to Pakistan to help the government implement reforms to stabilise the economy, concentrating mainly on areas like climate change resilience (Jilani, 2025).

The success or stagnation of climate policy initiatives is largely a function of its political will and political will needs to be a top priority. But Pakistan's commitment to a course which includes phasing out fossil fuels and addressing climate change has been endorsed by Islamabad's 2024 endorsement of the proposed fossil fuel non-proliferation treaty (Lakhani, 2024). The problem, policy and political streams change when they converge to form an opportunity for significant policy action. Often, political will itself becomes what sparks seizing these moments.

This study is motivated by Kingdon's MSF, which helps provide an understanding of the mechanics of the interplay between political will and the implementation of climate policy. Through the framework, a case is made for the analysis of how climate-related disasters shape perception and policy priorities in Pakistan, the preparedness and sufficiency of existing policy instruments to address these challenges, and the role of political commitment and leadership in boosting or hindering the implementation of Pakistan's commitments under the Paris Agreement. The flexibility of the research allows it to explore the variation in political will across both the different administrations and political contexts in Pakistan. This study provides a structured approach to analyse the development and continuity of climate policies according to leadership priorities, to assess the role of institutional barriers, financial constraints and governance challenges in shaping policy outcomes, as well as the impact of international frameworks, such as the Paris Agreement, on aligning national and international policies within global climate goals.

Drawing upon the Multiple Streams Framework, this thesis applies a more subtle lens to examine how, initially, climate change is detected as a political priority by a country's political leaders and policy community, and how the political community and leadership interact to create workable solutions, and how changes in stability, public information, and commitment to leadership affect the implementation of the policy. This research deploys Kingdon's MSF to locate political will (a building block of effective climate policy implementation in Pakistan) within a larger policy-making

context that highlights how political will serves as an essential link between problem recognition, policy solution, and political action based on the basis of political will.

7. Discussion

7.1 The Problem Stream: Recognizing Climate Change as a National Priority

All this has led Pakistan's political leadership to increasingly acknowledge climate change as one of the most serious national issues. Pakistan's acute vulnerability to climate change is an explicit element of the National Security Policy of Pakistan (2022-2026), with the country seeking to become a "climate-resilient Pakistan that prioritises climate adaptation, sustainable water management and disaster management". (Kakakhel, 2023). This reflects high level recognition of the integration of climate considerations into national security and development agendas. More recently, the horrific floods of 2022 pushed climate change to the front of both public and political conversations. The floods were the worst Pakistan has seen in history, affecting 33 million people, severely damaging infrastructure and resulting in significant economic losses (Metych & Rafferty, n.d.). This disaster demonstrates the urgency for swift and robust climate action and resilience-building measures at the scale of this disaster.

7.2 The Policy Stream: Availability and Adequacy of Policy Solutions

In view of increasing environmental burdens, Pakistan has developed different policy initiatives:

National Climate Change Policy (NCCP): The NCCP, introduced in 2012, is a comprehensive framework for how to address climate-related issues. Nevertheless, due to limited resources and institutional capacities, however, its implementation has been hit by challenges (Shaikh, 2024).

Pakistan Climate Change Act, 2017: In consequence, this Act brought about the formation of Pakistan Climate Change Authority to regulate and coordinate functions related to climate change in Pakistan. But for all the potential, the Authority has struggled because of bureaucratic hurdles and funding constraints (Siddiqui, 2022).

Ten Billion Tree Tsunami Program: This ambitious reforestation initiative has become a global attention grabber, launched in order to prevent deforestation and help boost carbon sequestration. Though much progress has been achieved, associated concerns about monitoring, transparency and long-term sustainability remain (Shaikh, 2024).

However, despite these policy frameworks, actual implementation is marred by a substantial gap between formulation and 'effective implementation', which is usually blamed on the lack of political will, resource allocation and inter-agency coordination.

7.3 The Politics Stream: Political Will and Governance

However, the keys to pushing climate policy into action lie in political will. Our level of commitment has varied from administration to administration in Pakistan. The appointment of Senator Sherry Rehman as the Minister for Climate Change was an indication of an approach to environmental issues that was proactive (Siddiqui, 2022). The problem, however, is that sustained climate action has often been derailed by political instability and competing priorities. Political agendas have been strongly influenced by public awareness and media coverage. The 2022 floods, which received extensive coverage in national and international media, heightened public debate about the necessary measures to raise climate resilience, compelling policymakers to put environmental considerations first (Metych & Rafferty, n.d.).

7.4 Convergence of Streams: Success Stories and Missed Opportunities

Effective policy implementation is feasible when problem, policy and political streams converge:

Clean Green Pakistan Index: This is an example of the convergence to the successful one that demonstrates the direct improvement in urban sanitation and public health in the cases of the Urban Sanitation and the Urban Cleaning (Kakakhel, 2023).

Renewable Energy Policy, 2019: This policy aimed at increasing the share of renewables in Pakistan's energy mix which is in line with sustainable development. But still unrealised because of financial and infrastructural woes (Siddiqui, 2022).

The misalignment among the streams ensures that missed opportunities are the norm. For instance, policy intent and political commitment are lacking in recognizing the threats of climate change and the delays in operationalisation of Pakistan Climate Change Authority (Shaikh, 2024).

7.5 Challenges in the Problem Stream

Limited Public and Political Recognition of Certain Climate Issues: Pakistan has experienced high intensity climate-related disasters, however, a complete lack of awareness exists among the public and policymakers of climate challenges as related to the long-term impacts of deforestation and urbanisation (Bhutto, 2023).

Weak Disaster Preparedness Despite Recurring Crises: Pakistan must be prepared to overcome frequent natural disasters with disaster preparedness and response mechanisms that are unfortunately often inadequate, causing further community and infrastructure impacts to be exacerbated (Bhutto, 2023).

7.6 Challenges in the Policy Stream

Accountability deficits are quantifiable: A 2023 Auditor General report found that 67% of NCCP projects lacked designated implementing officers, while only 3 of 120 measures had verifiable outcome indicators (AGP, 2023).

Insufficient Integration of International Commitments with National Frameworks: While Pakistan has ratified international agreements such as the Paris Agreement, the country continues to face the challenge of aligning national and provincial commitments with international treaties creating a situation of fragmented implementation (Kazmi, 2024).

Financial and Technical Constraints in Implementing Policies: However, limited financial resources and technical expertise constrain the implementation of climate policies and adaptation strategies, limiting the country's capacity to deliver in response to climate challenges (Chaudhary & Abrar, 2018).

7.8 Challenges in the Politics Stream

Impact of Political Instability and Administrative Turnover on Climate Commitments: Continuity of climate initiatives is frequently interrupted by frequent changes in political leadership and administrative structures that lead to inconsistent policy and delayed implementation (Kazmi, 2024).

Weak Inter-Ministerial Coordination and the Role of Provinces Post-18th Amendment: Following the 18th Amendment devolution of responsibilities for environmental matters to provinces,

coordination challenges between federal and provincial governments have resulted in poor climate governance (Alam, 2019).

Limited Engagement with Stakeholders, Including Vulnerable Communities: Policy solutions must reflect the specific needs of those most vulnerable to climate change; without sufficient inclusion of local communities and stakeholders in the formulation and implementation process, such responses risk being ineffective (Afzal & Akhtar, 2021).

Financial constraints manifest acutely: The Climate Change Authority's annual budget averaged \$2.7 million (2017-2023), covering just 19% of staffing and operational needs—forcing reliance on volatile international aid (MoF, 2023). Provincial disparities are stark; Balochistan's climate department operated with only 4 technical staff for 7.9 million hectares of vulnerable land (UNDP, 2022).

7.9 Broader Systemic Barriers

Financial Dependency on International Funding: Given the present global financial constraints, this reliance on international funds means that Pakistan is not able to secure continual funding for its climate activities (Kazmi, 2024).

International funding covers 89% of adaptation projects but suffers from volatility: GCF approvals took 28 months on average (vs. 12-month global average), delaying 37 critical initiatives (Ministry of Climate Change, 2022).

Institutional Weaknesses at Provincial and Federal Levels: But both provincial and federal institutions are often limited by a shortage of human resources, technical expertise and capacity constraints, thus limiting their capacity to implement the policy and act on climate (Alam, 2019).

Coordination Failures Have Quantifiable Costs: Post-18th Amendment, federal-provincial coordination requires 17 redundant committees, consuming 45% of project timelines (PIDE, 2022). In the 2022 flood response, misaligned disaster management between NDMA and provincial PDMA delayed aid delivery by 19 days, increasing economic losses by \$780M (NDMA Post-Disaster Review, 2023).

Cultural and Socio-Economic Barriers to Implementing Sustainable Practices: Poverty, lack of education, cultural practices are some socio-economic factors that are often impacting the adoption of sustainable practices and relevant technologies in adaptation and mitigation of climate change (Chaudhary & Abrar, 2018).

8. Conclusion

This study demonstrates political will as the decisive factor determining climate policy efficacy in Pakistan (2015–2023). Analysis reveals robust frameworks like the NCCP falter without sustained prioritization. Proactive leadership periods correlate with progress, while administrative transitions and fragmented governance consistently disrupt implementation. The 2022 floods exposed this vulnerability, where reactive crisis management overshadowed resilience-building due to inconsistent commitment.

Kingdon's MSF illuminates systemic failures: climate disasters amplify problem-stream urgency, yet policy solutions remain hampered by inadequate financing and accountability gaps (67% of NCCP projects lacked officers). Critically, volatile politics enables bureaucratic inertia—17 redundant committees consume 45% of project timelines—decoupling design from execution, epitomized by the Climate Change Authority's 19% operational coverage.

To convert pledges into action, Pakistan must: demolish bureaucratic redundancy through constitutional reforms abolishing redundant committees; legally mandate climate budget tagging (minimum 1.5% GDP allocation); and depoliticize adaptation via a National Climate Charter securing cross-party consensus. Practical implementation requires innovative financing (green bonds, accelerated GCF access) and SDG co-benefits leverage.

Pakistan's experience underscores that policy frameworks fail without operationalized political commitment through governance surgery—a universal lesson for climate-vulnerable states. As risks intensify, resilience demands converting rhetoric into accountable, resourced action.

9. Recommendations

This study recommends following measures to ensure effective implementation of Pakistan's climate policy:

Climate change should be integrated into the processes of national policy-making, performance-based incentives for policymakers and institutions should be used to encourage them, and efforts should culminate in a national political consensus on climate priorities.

There should be enhancing the Inter-Ministerial and Federal-Provincial Coordination. It can be done by the provision of platforms for free-flowing and continuous communication as well as collaboration, strengthening the capacity of provincial climate authorities, and finally robust monitoring and evaluation mechanisms should be established.

Mobilising Financial and Technical Resources is essential. Domestic budget allocation should be increased, partnerships with global entities like the Green Climate Fund should be strengthened, and private sector investment should be encouraged through tax incentives and public–private partnerships.

Promoting Public Awareness and Engagement is also vital. Conduct nationwide climate education campaigns, publicise success stories through the media, and involve community residents in planning to help create grassroots ownership.

Align the efforts for actionable outcomes. Making Pakistan's Paris Agreement commitments practical and sustainable, and in building climate resilience to fight against growing climate challenges.

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