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International Climate Change Regime and Pakistan's Response: Post-Paris Agreement

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Abstract

This paper examines the response of Pakistan to the issue of climate change following the Paris Agreement. It addresses the impact that the country has on climate risk as a security threat and its implication on its policies. The methods used were interviews and reading of the main policy documents. We evaluated the correspondence of the plans of Pakistan the National Climate Change Policy, 2012 and its 2021 revision with the expectations of the world and the needs of Pakistan. We discovered that Pakistan has done nice progress in initiating policy and preparation to climate change but still has huge challenges in implementing the same. These are the problems of inadequate funds, the issue of weak institutions and the interdepartmental lack of coordination between government policies. The research explains that in order to be effective, Pakistan requires stronger institutions, improved money alternatives, and political determination.

Keywords: Climate Change, Pakistan, Paris Agreement, Securitization, Climate Policy, Adaptation Strategies

Introduction

Climate change represents a large global issue that worries all nations, particularly emerging ones such as Pakistan. Due to the ease at which people are struck by floods, landslides and other calamities, Pakistan is at immense risk of the social and economic lives of its people. This paper will examine the response of Pakistan to the problem of climate change and particularly the ways in which it revised its regulations in the wake of the Paris Accord. When we regard climate change as a threat to national security, we learn about the efforts of Pakistan to defend itself and how its regulations can be reconciled with international agreements.

The challenge of climate change adaptation confronts the states. Furthermore, it ensures their right to develop so they can escape poverty. A single state cannot successfully combat the effects of climate change due to its vastness and diversity. Therefore, to spur collaborative efforts toward dealing with climate change calls for the creation of ICCR, alternatively, a consensual international climate change policy. (Bodansky, D, 2005). Reducing climate change's adverse and predictable impacts is

just as vital as reducing the harmful intake and accumulation of GHGs in the atmosphere.

The main goals of developing policies related to climate change are to reduce GHG emissions into the atmosphere by utilizing mitigation and to strengthen the adaptive potential of susceptible communities. The study significant contribution to the fields of environment and international affairs. Analyzing the dogmatic and fiscal foundations of the global climate change regime on both a national and international level also evaluates the potential and consequences of climate change for Pakistan.

Pakistan, a developing nation, is seeking resources to power its industry as it attempts to overcome its enduring poverty through continuous economic progress. However, due to the disrupted water cycles that produce drought in particular regions and flooding, it is vulnerable to severe climatic catastrophes. Pakistan has to develop a comprehensive climate change strategy to strengthen its capacity development against the predictable costs and hazards of climate change without jeopardizing its growth, given its high vulnerability to the global warming phenomenon. Pakistan created strategies to contest global climate change since it is thought that the phenomenon's unavoidably severe effects might further stifle Pakistan's economic development.

Literature Review

Pakistan has responded to the global climate regulations following the Paris Agreement in a manner that is aimed at attempting to counter its own shortcomings with the obligation of fulfilling the promise of the world. Pakistan does not generate much gas per person, but it faces an extreme risk of climate change, and thus it must have robust strategies to adjust and minimize the issues. The nation has made efforts in the area of policies that are being implemented. It is planting additional trees, renewable energy initiatives, and good agriculture. Such measures can contribute to resolving local and global climate issues and make the nation more difficult to break and more sustainable.

National Policies and Initiatives on Climate Change

Its National Climate Change Policy, which began in 2012 and was revised in 2021 is concerned with community-led projects, good farming, and clean energy use (Sherin, A, 2023).

Primary projects aimed at trapping large amounts of carbon and transforming cities into more sustainable settings are the Ten Billion Tree Tsunami Program and the Urban Forest Project by the Prime Minister, which attempt to plant trees in urban areas (Khan et al., 2025). Pakistan is also constructing dams and hydropower plants to control water, struggle against water shortages, and make the country more resilient to climate changes (Sherin, A, 2023).

International Obligations and Co-Operation

The promise to the Paris Agreement is reflected by the Nationally Determined Contributions (NDCs) to Pakistan. These will plant additional trees, preserve wild animals, and create green jobs (Khan et al., 2025).

Pakistan also requests assistance of other nations. It also exchanges ideas and acquires new technologies to enhance the way it approaches climate change (Sherin, A, 2023).

The Opportunities and Challenges

Pakistan is constrained by money and lacks modern infrastructure, which makes it difficult to initiate large-scale climate projects in the country (Sherin, A, 2023). Nevertheless, despite these issues, the priorities of Pakistan towards clean energy and smart farming provide both the opportunities to grow and become even harder (Khan et al., 2016).

The efforts made by Pakistan are good, though we are not quite convinced with the overall effectiveness of the promise system of the Paris Agreement. The agreement has an interpretation aspect and as such, the countries can choose to commit less, which could possibly mean less. The achievement of Pakistan will require continual assistance of the other countries and firm backing of the politicians themselves in order to make climate action their primary concern (Keohane and Oppenheimer, 2016).

Theoretical Framework

Securitization Theory and its Application to Pakistan's Climate Change Policy

Securitization theory was developed by Buzan, Waever, and de Wilde in 1998 and serves to understand how an issue can be transformed into security threat. In such a way, governments are able to make powerful or immediate steps. The key argument of securitization is that although climate change has traditionally been perceived as a

mere environmental issue, it can also be turned into a security threat that must be addressed promptly, even in an emergency. This is very important in changing the perception to implement climate policy and action particularly in the countries that are highly susceptible to climate such as Pakistan.

It is a consensus that the theory of securitization is effective in climate change. It demonstrates the way in which governments can explain environmental issues as security issues. In Pakistan, climate change is perceived as a security challenge in the country. This is due to the fact that floods, droughts, and starvation usually occur with climatic changes (Sultan & Ali, 2025). Pakistan can manage to finance its own funds and seek assistance of other nations by labeling climate change as a security threat. It incorporates climate action into the overall national security (Hussain, 2025). This assists Pakistan to discuss the fairness in climate and request the wealthy nations to provide money (climate finance) by stating that it is required to ensure that the nation is safe and stable.

The real policy of Pakistan is based on securitization theory. To illustrate, the Climate change is enlisted within its National Security Policy in 2021 as one of the key non-traditionally threatening factors to the nation (Sultan & Ali, 2025). Trying to address climate change as a security challenge, Pakistan can leverage the concept during negotiations with the United Nations Framework Convention on Climate Change (UNFCCC) and the Paris Agreement (Khan, 2025). Securitizing climate change is also effective in making Pakistan align their environment and defense policies. It introduces the climate risks into the primary security plans (Shah & Qureshi, 2025). Because of this, Pakistan is strategizing such issues as a more resilient construction that is capable of withstanding climate disasters, new disaster management strategies, and clean energy to ensure that the power supply in the country is not put at risk (Baloch & Tariq, 2025).

However, criticism can be found as well. According to some scholars, the denial of significant issues such as fairness, equal rights, and rights of people, particularly, the poor, can be caused by labeling the climate change only as a security problem (Sultan and Ali, 2025; Hussain et al., 2024). It may also lead to the governments employing military measures that are not the most appropriate and just solutions (Shah & Qureshi, 2025).

Nonetheless, the application of the securitization theory is applicable to understand how Pakistan manages climate change. It reveals why the issue is acute and provides an option to discuss money, technology, and collaboration with other countries to get used to. The more Pakistan adopts climate change as a matter of national security, the more the securitization theory demonstrates how it can influence climate policy to those countries that are prone to it.

Research Methodology

The research method employed in this study is a qualitative one and it examines policy documents, reports as well as the available literature. It dwells on climate policies and strategies of Pakistan following the Paris Agreement. Themes, patterns, and relationships are found in the analysis, particularly the ways in which the policies of Pakistan coincide or contradict the global commitments.

Comparative Analysis

The experience of other countries in terms of the climate change regulations can help a lot in the creation of our ideas about their effectiveness. Pakistan has made much to combat the issue of climate change but other nations, and in particular the Global South have also experienced the same issue. They have employed tactics which could be models to Pakistan. **See below**

Table 1: Pakistan's Legal Framework on Climate Change

Legislation/Framework	Purpose	Key Provisions	Impact on Climate Policy	Source
Climate Change Act (2017)	To establish the Climate Change Authority and enable climate action through legal mandates	Creation of the Pakistan Climate Change Authority (PCCA); establishment of the National Climate	Strengthened institutional framework for climate governance, yet still facing issues in execution	UNFCCC (2025), Shah & Qureshi (2025)

Legislation/Framework	Purpose	Key Provisions	Impact on Climate Policy	Source
		Change Policy		
National Environmental Policy (2005)	To address broader environmental issues and reduce environmental degradation	Addresses water management, air quality, and biodiversity conservation; incorporates climate adaptation measures	Provides a baseline for environmental governance, but needs updating to align fully with Paris Agreement commitments	Ministry of Climate Change, Pakistan (2005)
Pakistan's Nationally Determined Contributions (NDC)	To align Pakistan's climate action with the Paris Agreement's goals	Commitment to reduce GHG emissions by 15% by 2030, conditional on international support	Despite the policy commitment, implementation is hindered by financial limitations and lack of technological capacity	UNFCCC (2025), Hussain (2025)
Pakistan Environmental Protection Act (PEPA, 1997)	To ensure environmental protection through enforcement of regulations	Focuses on environmental quality standards, pollution control, and the	Contributes to environmental sustainability, though limited in scope for addressing climate change	Government of Pakistan (1997), Hussain (2025)

Legislation/Framework	Purpose	Key Provisions	Impact on Climate Policy	Source
		establishment of environmental tribunals	directly	

Climate protection has been included in the plans of the country being built in Bangladesh. One of these plans is the Bangladesh Climate Change Strategy and Action Plan that it introduced in 2009 assigning itself the responsibility to ensure that people are less exposed to disasters, to ensure that water is used more efficiently, and that food is produced in a manner that does not harm the environment. Bangladesh has adapted its local concepts such as constructing the shelters with cyclones and cultivating crops that can resist floods and Pakistani citizens may imitate some of those concepts in order to be more resilient to climate threat (**Hossain, M, 2024).**

Equally, the climate regulations of Nepal focus on local leaders and individuals who operate the plans. National Adaptation Program of Action in Nepal is an initiative that empowers the people in the ground to participate and it has assisted people to be prepared to the impacts of climate change (**Sharma, B., 2025).**

Pakistan on the other hand has a system that is largely government top-down. Despite its comprehensiveness, it would be improved with more solutions being community based as in Bangladesh and Nepal. Examining the plans of Pakistan and contrasting them with the plans of Bangladesh and Nepal, we can observe how Pakistan can strengthen its climate defenses with the help of its locals and resilience (**Hussain, F, 2025).**

Paris Climate Change Agreement

The agreement was signed in 2015, at Paris. It is a large global agenda to prevent excessive hotness of the planet. It prefers not to exceed 2 o C, preferably not even 1.5 o C. In the case of Pakistan, this agreement serves as a blue print on how it can go about its plans.

In 2016, Pakistan was the signer of the agreement. It promised to reduce its emissions by 15 per cent by 2030 in case it receives funding and assistance of other nations. This indicates that Pakistan is considering climate change as a significant

danger to its security and survival. **(UNFCCC, 2025).**

But Pakistan faces problems. Although it has attempted to adhere to the agreement, it lacks sufficient funds as well as powerful institutions. The developed countries possess greater monetary and technological resources. Pakistan depends on the assistance of the world. Therefore, the success of the Agreement in Pakistan is conditional on the other to offer assistance, that is, money, technology, and training. What we get to know, through the agreement, is that in order to combat climate change, Pakistan requires good domestic regulations and international assistance to safeguard the weak nations. **See below**

Table 2: Global Climate Change Regime

Framework/Agreement	Key Objectives	Key Provisions	Significance for Developing Countries	Source
UNFCCC (United Nations Framework Convention on Climate Change)	To stabilize greenhouse gas concentrations to prevent dangerous human interference with the climate system	Sets the foundation for international climate agreements; annual Conferences of the Parties (COP) meetings	Provides a framework for climate negotiations and supports adaptation and mitigation efforts worldwide	UNFCCC, 2025
Kyoto Protocol	To legally bind developed countries to reduce their greenhouse gas emissions	Establishes emission reduction targets for industrialized countries, includes carbon	Focuses on developed nations, with limited obligations for developing countries like	UNFCCC (2007)

Framework/Agreement	Key Objectives	Key Provisions	Significance for Developing Countries	Source
		trading mechanisms	Pakistan	
Paris Agreement	To limit global temperature, rise to below 2°C above pre-industrial levels, aiming for 1.5°C	Nationally Determined Contributions (NDCs), climate finance, transparency and accountability mechanisms	Developing countries are provided with financial support to meet emission reduction and adaptation targets	UNFCCC, 2015
Green Climate Fund (GCF)	To assist developing countries in reducing their greenhouse gas emissions and adapting to climate impacts	Provides financial assistance for climate mitigation and adaptation projects in developing countries	Directly relevant for Pakistan's climate resilience efforts, offering funds for projects and capacity-building	GCF, 2025

Results and Discussions

The policies of climate in Pakistan are comprehensive, yet they are difficult to implement due to the weak institutions and limited resources. Although Pakistan has already made a pledge of adherence to the Paris Agreement, its domestic policies are still lacking in alignment with global objectives of climate regulation. **See below**

Table 3: Pakistan's Response to Climate Change Post-Paris Agreement

Area of Focus	Policy/Initiative	Key Actions Post-Paris Agreement	Challenges	Sources
Climate Mitigation	**National Climate Change Policy (NCCP)**	Pledged a 15% reduction in GHG emissions by 2030 under the Paris Agreement's NDCs	Limited institutional capacity and financial resources for large-scale projects	UNFCCC (2025), Hussain (2025)
Climate Adaptation	**National Adaptation Program (NAP)**	Focuses on enhancing climate resilience in water resources, agriculture, and human health	Slow implementation due to fragmented governance structures and lack of coordination	Shah & Qureshi (2025), UNDP (2025)
Renewable Energy Development	**Alternate Energy Development Board (AEDB)**	Increased investment in renewable energy sources such as solar, wind, and hydropower	Dependence on external financial aid and technological expertise	World Bank (2025), Hussain et al. (2024)
International Cooperation	**Paris Agreement Commitments**	Active participation in COP meetings, commitment to international climate financing mechanisms	Delays in receiving promised financial support and technology transfer	UNFCCC (2025), Baloch & Tariq (2025)
Public Awareness & Capacity Building	**Pakistan Climate Change Authority (PCCA)**	Strengthening capacity for policy implementation, engaging	Public awareness campaigns are still in their nascent stages	Hussain (2025), Khan (2025)

Area of Focus	Policy/Initiative	Key Actions Post-Paris Agreement	Challenges	Sources
		stakeholders in climate action		

The zeal and determination necessary to address a securitized issue are still largely absent from Pakistan's decision-making processes regarding climate change, despite the rising recognition that it is a matter of national security. On November 10, 2016, Islamabad ratified the Paris Agreement, pledging to adhere to the agreement's ultimate aim of preventing global warming to 2°C. Therefore, explore NCCP 2012, NSDS 2012, Framework for Implementation of Climate Change (2013), and an updated version of NCCP 2021, this chapter examines Islamabad's policy response for sustainable growth in the context of climate change. It is necessary to evaluate the core of climate-resilient development, the crucial objective of NCCP (2021) in connection to sustainable development, to comprehend Pakistan's approach to sustainable progress in the context of climate change (Ahmad, U., 2021). The knowledge gained from this comprehension will assist us in assessing sustainable development initiatives based on the stated policy provisions.

Goal of National Climate Policy

The NCCP of Islamabad seeks to promote sustainable development while addressing issues raised by climate change. Favorable and gender-sensitive adaptation techniques receive special attention, and when possible, cost-effective mitigating measures are favored. The strategy places a strong emphasis on the need for climate-resilient infrastructure, tracks how climate change is affecting the security of food, water, and energy, and implements modifications to assist these vital industries.

The NCCP promotes the creation of climate-resilient food systems and agriculture that are adapted to the various agroecological zones of the nation. Additionally, it promotes the switch to less carbon-intensive, lower-emission, and cleaner growth routes. Within the context of the Sustainable Development Report 2020, achieving strategy rationality and integration to accomplish the SDGs of the UN and meeting Pakistan's NDCs are prioritized (Ahmed, W., & et al, 2020).

The goal of the program is to offer financial incentives to increase governmental and private sector spending on mitigation and adaptation strategies. Improving key

stakeholders' knowledge, abilities, and institutional capacity is also underlined. In addition, the NCCP supports long-term sustainability, nature-based solutions, tree planting, and the preservation of natural resources. This all-encompassing strategy emphasizes how crucial it is to develop flexibility and resilience in the face of climatic problems to secure Pakistan's sustainability in the future.

Sustainable Development Through Climate-Resilient Development

As was covered in the previous chapter, there are major risks associated with climate change, which has also led to significant infrastructure losses, significant human displacement, and high death rates. To achieve climate-resilient development, which would guarantee continued growth in the face of climate hazards, a comprehensive plan, a multidisciplinary approach, and broader stakeholder participation from individuals to bigger communities, are required. Overcoming structural-developmental deficiencies that restrict adaptation capacity and increase vulnerability is another vital necessity. The NSDS 2012, which was developed in response to the catastrophic effects of climate change, characterizes Pakistan's response as being characterized by a suitable policy that has institutional and legal support and is condensed into strategies and programs that can be implemented, while the policy must keep up with changing technological developments as well as social and economic concerns.

As stated, the NCCP (2012) and its Implementation Framework for Climate Change (2013) offer broad policy frameworks that highlight Pakistan's susceptible areas, particularly those related to food, energy, and water, and suggest necessary actions. The NCCP (2012) lays out goals, identifies risks to different susceptible sections especially the potential for energy, food, and water scarcity, and offers several mitigation and adaptation strategies to implement climate-resilient development.

Pakistan settled its first NCCP in 2012 and after the Paris Climate Accord 2015, Pakistan agreed to subsidize to the global emissions lessening efforts. Pakistan has now revised its approach, and the NCCP-2021 places equal emphasis on mitigation and adaptation with a particular focus on natural solutions. The government's flagship "TBTTP" is highlighted in the amended NCCP 2021, along with the Prime Minister's "Urban Forest Project," "Clean Green Pakistan Movement,"

"Protected Areas, and National Park Initiatives." By 2023, the last two programs aim to increase the area under protected areas to at least 15% of Pakistan's total land area. Furthermore, the ESRI is emphasized heavily in the strategy as a means of mainstreaming adaptation and mitigation through ecologically focused programs, hence easing Pakistan's transition towards environmental resilience. Most recently, the Prime Minister of Pakistan laid out the plan for decarbonizing the nation's economy through the use of renewable energy sources in his statement at the "UN Climate Ambition Summit" in December 2020 (Baloch, S. M., 2025).

Climate Change Adaptations

Pakistan has begun the process of developing a National Adaptation Plan to strengthen its resilience to global warming. Pakistan wants to strengthen the NDCs' resilience methods, which are an essential element of the 2015 Paris Agreement, by implementing the National Adaptation Plan procedure and results. In accordance to the latest UNEP report, "Pakistan's Inclusive Wealth," an index of the nation's financial status and ecological integrity that considers ecological, social, and fiscal concerns, has increased by an ordinary percentage of 2.3% every year.

Water Resources

Pakistan's water sources, which mostly come from melting glaciers, and monsoon rains, are extremely susceptible to climate change. Acknowledging this, the nation passed its first National Water Policy in April 2018, which includes steps to address the diminishing quality and quantity of water, which is made worse by climate change. Key initiatives include constructing and upgrading water storage facilities, protecting groundwater, adopting efficient irrigation techniques, preserving water catchment areas, recycling wastewater, and exploring transboundary water management. Additionally, the policy emphasizes the need for legislative action to protect water resources, enhance technological capacities for water management, and raise public awareness about water conservation and sustainable use.

Agriculture and Livestock

As the main industry in Pakistan and a vital component of human life, agriculture accounts for 80% of export revenue, employs 42.3% of the workforce, and contributes 18.9% of the country's GDP. Nevertheless, it is extremely susceptible to climate change. The 2018 National Food Security Policy seeks to improve the profitability,

productivity, and climate resilience of agriculture. Temperature rises brought on by climate change shorten agricultural growth cycles, which hurts crop yield and animal feed. Pakistan's policy includes many adaptation measures to reduce these risks, such as the development of climate impact simulation models, the breeding of heat- and drought-resistant livestock, the creation of high-yield crop varieties, the building of comprehensive datasets on soil, crop, and climate parameters, the improvement of research capacity to predict climate impacts on agriculture, the promotion of sustainable land management practices, the dissemination of scientific knowledge to the farming community, and the documentation of indigenous knowledge and best practices.

Human Health

Extreme weather events are becoming more often and intense due to climate change, which poses serious health hazards to people. Events like heat waves, cold waves, cyclones, heavy precipitation, high winds, and other weather patterns lead to direct problems like injuries and death as well as indirect problems like diarrheal illnesses brought on by a lack of clean water. To address these challenges, the Government of Pakistan has outlined several policy measures: assessing community health vulnerabilities and building capacities to reduce them, incorporating, including health care climate change actions in national health plans, teaching medical professionals and the general public about climate-related health concerns, and assuring the accessibility of preventive efforts and assets during catastrophic conditions, upgrading disease outbreak monitoring systems, improving data management for climate-sensitive diseases, conducting impact assessments on vector and waterborne diseases, prioritizing climate-related risks and identifying resilience options for the WASH sector, exploring public-private partnerships for WASH service provision, and adopting sanitation plans (Iqbal, M. P, 2020).

Forestry

Pakistan's forestry sector is already at risk from climate change because of altered habitats and degraded soil while just 5.45% of the country's territory is covered by forests followed by deforestation. The National Forest Policy (NFP) 2017 takes a three-pronged strategy to address these issues: upholding international commitments, maintaining existing forests, and growing tree cover through community involvement.

To increase forest cover and carbon sequestration, the strategy encourages large afforestation, as demonstrated by the Ten Billion Tree Tsunami Program (TBTTP). Adaptation measures include raising awareness of the advantages of forests, streamlining land tenure systems via governance reform, strengthening the skills of forest workers, and implementing sustainable forest management techniques. Afforestation, reforestation, mangrove restoration, indigenous knowledge integration, alternative fuel promotion, and fighting forest fires, and insect outbreaks are some of the specific tactics. These actions are intended to lessen the effects of climate change and encourage the sustainable use of forest resources for the benefit of communities and the environment (Najeeb, R., 2023).

Biodiversity

Pakistan's biodiversity is impacted by climate change, which affects phenology, species distribution, and ecosystem dynamics. The capacity of many species to adapt may be outpaced by the fast rise in temperature, putting ecological services that are essential to human cultures in jeopardy. The Ecosystem Restoration Initiative (ESRI) and Ecosystem Restoration Fund (ESRF), which prioritize afforestation, biodiversity and marine protection, eco-tourism, and electric cars, were established by Pakistan's government in response to these challenges (Anwar, M., 2022).

Policy measures include setting National Biodiversity Indicators, establishing gene and seed banks, conserving ecosystems, integrating biodiversity conservation across disciplines, and involving local communities. Additional strategies involve establishing nature reserves, assisting species migration, managing invasive species, and expanding and managing protected areas to ensure ecosystem resilience. These efforts aim to sustain Pakistan's biodiversity and enhance ecosystem-based adaptation to climate change.

Disaster Management

The incidence and strictness of climate-related natural catastrophes in Pakistan, such as floods, droughts, cyclones, landslides, and urban flooding brought on by poor drainage systems, are predicted to increase with climate change. Since extreme weather events are the main cause of this increased risk, adaption and readiness measures are crucial. The government of Pakistan has outlined a comprehensive framework to address these issues (Ahmed, Z, 2013). This framework includes

building strong disaster management institutions, implementing the Sendai Framework for Disaster Risk Reduction, and allocating sufficient resources for the National Disaster Risk Management Framework. Key strategies involve investing in nature-based solutions, upgrading storm drainage systems, strengthening early warning systems, and constructing disaster-resilient infrastructure.

Climate Change Mitigation

In contrast to global norms, Pakistan has low per-capita greenhouse gas (GHG) emissions. Pakistan produced a total of 490 million tons of CO2 equivalents in GHG emissions during 2017 and 2018. With about 46% of all GHG emissions in Pakistan coming from this sector, the energy sector (45%), emissions, and trash (4%), and industrial processes (5%), round out the top five sources of GHG emissions. Therefore, the energy and agricultural sectors should be the primary focus of mitigation initiatives aimed at lowering GHG emissions. Integrating climate change and energy policy goals is crucial for the energy industry since the infrastructure, fuel, and technology of today will be "locked in" for decades to come with today's investments. Similarly, the transportation and building infrastructure that is established now needs to accommodate future design requirements. Consequently, long-term transportation planning and building code requirements for energy efficiency need to get more attention. According to economic research, at present prices, an expenditure of almost USD 40 billion would be needed to achieve a 20% decrease in the predicted emission statistics for 2030.

Comparably, a 15% decrease in GHG production is equivalent to USD 15.6 billion, while a 10% lessen is equivalent to USD 5.5 billion. Under the terms of the Paris Climate Agreement's CBDR principle. The PM most recently established Pakistan's course for decarbonizing the national economy during his statement at the "UN Climate Ambition Summit" in December 2020. He claimed that by 2030, “thirty percent of duty cars in the nation will be electric, and Pakistan will no longer seek the importation of coal power plants.” He also declared that sixty percent of all energy generated in the nation would be "clean and through renewable resources." These broad declarations, together with a "TBTTP”, can serve as the nation's road map for decarburization and accomplishing the objectives of the NDC (Hussain, M., & et al, 2020).

An effective mitigation policy likewise relies on renewable and effective energy bases and cumulative dimensions of carbon sinks.

Conclusion

The recent Paris Agreement has influenced Pakistan to alter its approach to climate change since it intends to incorporate climate resilience into its country development plans. However, there are still challenges in implementation and need of greater institutional power and resources. This paper examines the policies of Pakistan on climate since Paris and reflects that it is prone to climate changes and is trying to keep pace with international commitments. Pakistan has gone in the right direction through developing detailed climate plans, including the national climate change policy (NCCP) and its revision in 2021, which aim at adaptation, mitigation, and sustainable development. The association of climate change with national security has allowed Pakistan to access global support and resources to action on climate change. The climate change as a security concern has given Pakistan a better position at the international negotiations, which can overcome climate hazards and conventional security dangers.

Nevertheless, despite the fact that the design of policies has been improved, there remain difficulties at the implementation level. The most critical issue is weak institutional capacity, fragmented governing and lack of coordination between the federal and provincial authorities. Even with global commitments, it is not easy to raise sufficient funds to finance massive climate projects.

In order to combat climate change, Pakistan should have more coordinated approach with enhanced policy congruency, stronger institutions, and more transparent financial instruments. Another way is the creation of public awareness and political commitment that will translate into action by policies. The paper reveals that Pakistan requires a more effective and integrated climate governance framework to achieve its objectives and manage the security threats posed by climate change.

Recommendations

Strengthen Policy Integration

Ensure that climate policies interact harmoniously in all sectors such that they are aligned to national development objectives and international treaties.

Enhance Institutional Capacity

Design training programs to impart technical skills to the government at all levels so that the policies are implemented effectively.

Promote Renewable Energy

Establish measures and incentives to accelerate the adoption of renewable energy, such that Pakistan will not depend much on fossil fuels.

Expand Nature-Based Solutions

Establish natural nature-based initiatives such as the Ten Billion Tree Tsunami Program and the Ecosystem Restoration Initiative as a way of biodiversity and ecosystem services conservation.

Improve Monitoring and Reporting

Establish effective mechanisms of tracking and reporting on climate policy implementation and keep parties accountable.

Increase Public Awareness

Involve communities by adding climate change lessons in schools, and conducting campaigns aimed at making communities aware.

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