UOS Journal of Social Sciences & Humanities (UOSJSSH)
ISSN (P) 2224-2341, ISSN (E) 2310-0249
Volume: 8, (2) 2024, Pages (83-90)
Journal Homepage: https://uosjssh.su.edu.pk/

Climate Change and World Politics: Implications and Challenges for Pakistan

Fatima Munawar
MS Scholar, Department of Politics & IR, Govt. College Women University, Sialkot

Atra Komal
Lecturer, Department of Politics & IR, Govt. College Women University, Sialkot
Atra.komal@gcwus.edu.pk

Iqra Latif
Lecturer, Department of Politics & IR, Govt. College Women University, Sialkot
Iqra.latif@gcwus.edu.pk

Abstract

Climate change is a great threat to Pakistan's economy, security, and livelihoods. Rising temperatures, extreme weather events, and water scarcity have serious consequences. This study explores the implications of climate change on world politics and its challenges for Pakistan. A qualitative approach is used to analyze secondary sources. The study finds that Pakistan faces many challenges, such as shifting temperatures, water scarcity, floods, and coastal erosion. Climate change influences agriculture, human migration, and the economy. The research provides financial support, technology sharing, capacity building, and international cooperation to face challenges of climate change. Developed countries should realize that they have emitted greenhouse gases during their historical processes and therefore, a customized package has to be presented to them. Climate justice and equity are highly important in the international climate policy. Proper execution of climate change mitigation and adaptation strategies will enhance Pakistan's sustainable development.

Key Words: Climate change, World Politics, Pakistan, International Cooperation, Challenges, Sustainability and Environmental Governance

Introduction

Climate change has proved to be a significant global problem that has dominated the globe due to its disastrous ramifications. The phenomenon has surpassed all the limits and threatened several islands and triggered global movements of people. Recognized as a major threat, climate change has now emerged as one of the most pressing matters of international diplomacy. Not a single country is safe form this severe threat and Pakistan is also one of them. (Waheed, Aneela, 2021)

Climate change severely affects Pakistan's economy, security, and livelihoods. Glaciers melting due to rising temperatures affect water resources. Floods and droughts cause havoc to agriculture and food security. Rising sea levels threaten coastal communities and infrastructure. Water scarcity and heat waves enhance health issues. Climate migration and displacement strain urban resources. Pakistan's vulnerability to climate change is compounded by its limited capacity

to adapt and respond. The political geography surrounding the location of Pakistan, touching both India, China, and Afghanistan, makes things a bit complex in relation to climate diplomacy.

Climate change is a huge challenge for Pakistan, economic stability, environmental sustainability and social cohesion. Pakistan has to address the challenge through multi-pronged approach. Diversification of energy, climate resilient agriculture and improvement of disaster risk reduction frameworks must be done. Climate education and awareness, international cooperation and green infrastructure investments are important. It will require strong institutions, good governance, and coordination to implement the same. Pakistan should focus on climate smart water management and advocate for climate justice in the global scenario. The above will make Pakistan a climate resilient and sustainable state. Addressing climate change can save people, economies, and the environment in Pakistan. This discussion will attempt to cast a nuanced light upon how climate change and world politics merge in Pakistan's situation.

Literature Review

Climate change poses an important danger to Pakistan, which increases the risks of disasters, aggravates economic uncertainty and insecurity, increases famine, and generates social anarchy. There are specific interests attached to agriculture-driven economies and the population's health, livelihood, and lifestyle. Gaps exist in extant research, such as a serious dearth of empirical studies using contemporary data, sparse comparative study, no theory framework as applied, and weak relevant policy response. To bridge the gaps, the study intends to conduct empirical research by using the latest available data, comparative analysis, development of a theoretical framework, qualitative/quantitative methods, analysis of earlier policies, and evidence-based adaptations through stakeholder engagement from grassroots to policy levels, informing effective policy measures to mitigate climate change impacts in Pakistan (Ahsan, 2022).

The severe challenges of climate change are challenging Pakistan, which faces these threats towards food, water, and coastal cities, which further add to the changing pattern of weather, the scarcity of food, and the uncertainty of the economy. In the areas of current research, gaps have appeared, such as the dearth of empirical studies concerning climate challenges in Pakistan, fewer policy analyses in regards to social and economic issues, and a lack of comparison analysis with regional and international countries. To fill such gaps, this study calls for an empirical study involving the most vulnerable populations to get proper input, engaging experts of the environment with this sector, grassroots sensitization up to policy, formulation of theories on climate change from a human rights perspective and frameworks of climate justice (Imran, 2022).

Climate change is, to some extent, an existential threat to Pakistan, but it sends out next to nothing in terms of carbon, and this is because of the excessive consumption of resources on the part of global elites. This is a highly devastating social, political, and economic reality for Pakistan. However, existing responses are not effective enough because there are gaps in lack of recognition as a serious threat, insufficient funding, failure to prioritize climate security, uneven focus on national security, and limited global awareness. The defects shall be filled by transformative actions. These include a shift towards renewable energy, climate resilience policies, and sound water management, achieving the goals set in the Paris Agreement, enlightenment of global elites, and climate justice for vulnerable countries (Zahid, 2023).

This special issue explores domestic and international climate policy, with a focus on institutions, interests, and networks as drivers of outcomes. It addresses proportionality in policy and under/overreactions. Importantly, the literature has not conducted comparative analyses on climate policy proportionality and the impact of institutions, interests, and networks. To fill this gap, future research should apply comparative analyses and develop proportionality frameworks, integrating institutional, interest-based, and network perspectives to balance policy benefits and costs (Tosun & peters, 2021).

The impact of great power politics on the mitigation of global climate change is the focus of this research. The study analyzes the influence of the coordination and cooperation of major nations on climate progress. Geopolitical disputes and internal politics are impediments to cooperation. There are no comprehensive analyses in the literature on how the great power politics impact the climate change mitigation process, especially considering geopolitical disputes and internal politics. The least researched areas are case studies on how major power couples build strategies for climate cooperation. It is essential to look at how the politics of great powers influence climate change through case study and analysis of geopolitical disputes and internal politics of mitigating it in future studies. Such frameworks are important to be developed among the great powers for collaboration (Munir, Sultan & Chaichi, 2023).

Pakistan is vulnerable to climate variability, but good natural resources management will definitely ease the burden of this challenge. Awareness and integration into the public sector and incentives to business are very important but data sharing and stakeholder engagement become the backbone for proper planning and climate action. Still, there are areas for climate variability research in Pakistan; these include strategies to ensure effective implementation in the area of sustainable resource management and integration of climate-smart action into business practice as well as data-driven decision making and stakeholder engagement. This means that future research must include effective implementation strategies on sustainable resource management in Pakistan with integration of climate smart actions into business practice and public sector policies, data driven decision making and other stakeholders (Hussan, 2023).

The analysis focuses on the issue from viewpoints such as politics, international cooperation, and legal underpinning, all bounded within a framework guided by efforts to reduce global emission by the Paris Agreement and the UN's SDG. Solutions come from science and understanding of climate impact; therefore, it represents effective integration of policy and law with science. The gaps in literature are identified in the effective implementation of Paris Agreement/SDGs, integration of science into climate policy, and comprehensive analysis of climate litigation concerns and evolution of environmental customary law. These research gaps should be bridged by focusing on the effective implementation of Paris Agreement/SDGs, integrating science into climate policy and decision-making, and analyzing climate litigation and evolving environmental law, which should be evidence-based solutions to the climate crisis (Sheer, shoupig & Sidra, 2019).

Research Methodology

A qualitative approach has be taken to analyze the implications of climate change on world politics and its challenges for Pakistan. This study have rely more on secondary sources, such as academic articles, policy papers, and government documents. Case study analyses of Pakistan’s experiences with climate change have be conducted. Thematic and content analysis has be used

to analyze data. The study aims to answer research questions on the implications of climate change on world politics and Pakistan's experiences. It has provided a comprehensive understanding of the challenges and opportunities arising from climate change for Pakistan. Relevant data has been collected from reputable sources, ensuring the validity and reliability of the study.

Discussion and Results

Climate change refers to long-term changes in temperatures and weather patterns. Such changes can be natural, due to variations in the sun's activity or large volcanic eruptions. However, since the 1800s, human activities have been the primary cause of climate change, mainly because of the burning of fossil fuels such as coal, oil, and gas. The combustion of fossil fuels releases greenhouse gases that serve to wrap a blanket around the Earth, trapping heat from the sun and warming it. The main greenhouse gases causing climate change are carbon dioxide and methane. These include the use of gasoline to run a car or coal to heat a building, for instance. Clearing land and cutting down forests can also release carbon dioxide. Agriculture and oil and gas operations are some of the largest sources of methane emissions. Among the main sectors causing greenhouse gases are energy, industry, transport, buildings, agriculture, and land use. “Climate change is real. It is happening right now, it is the most urgent threat facing our entire species and we need to work collectively together and stop procrastinating.”

(Leonardo Di Caprico, Actor and Environmentalist)

Climate change has been a burning global issue since the 1992 Earth Summit in Rio de Janeiro. The Kyoto Protocol of 2005 and the Paris Agreement of 2015 tried to control climate change, but for developing countries like Pakistan, it was a major challenge. In 2007, Pakistan faced devastating floods, which exposed its vulnerability. The 2010 Pakistan floods were among the worst in history, affecting 20 million people. Pakistan ratified the Paris Agreement in 2016, committing to reduce greenhouse gas emissions. Global efforts notwithstanding, climate change remain a serious threat to Pakistan's economy, food security, and human settlements. Pakistan's climate vulnerability has emerged as a pressing concern in global politics.

There is politicization of climate change issues due to economic interests are more valued than any environmental concern in developed countries. They have been widely criticized for using the threat of climate change as a tool to control developing countries. They impose their agendas and conditionalities upon them. It has also been criticized that those developed nations are least committed to reducing emissions of greenhouse gases, but instead, they are mostly focused on techno-fixes and market-based solutions. Other than that, they used the climate issue as an excuse to serve their own economic interest in terms of the export of clean energy technologies. In short, it is known as "climate imperialism" because the developed world exploits the climate crisis for their advantage. Moreover, developed countries are very slow to provide climate finance and technology transfer to developing countries while the greenhouse gas emissions emanated from their activities over a long period of time. This has created an imbalance of power, where the developed countries determine the terms for climate action and the developing world bears the brunt of the crisis. The politicization of climate change has also marginalized vulnerable communities by excluding them from decision-making processes. Overall, the politicization of climate change by developed countries has hindered global efforts

at addressing the crisis. The United States and European countries have been responsible for emitting the most greenhouse gas emissions in history. Poor countries like Pakistan have reaped devastating climate effects and include rising sea levels and extreme floods and drought. They bear the cost without making a minimal contribution in terms of global emissions. Climate politics have unfairly distributed the burden on poor developing nations (Kopra, 2018).

Pakistan is bearing following countless challenges owing to Climate Change

The first challenge has Pakistan faced shifting temperatures and heat waves. Pakistan's temperature has risen by about 0.5 degrees Celsius since 1960, as reported by IPCC, 2021. Frequent and intense heat waves lead to heat-stroke-related illnesses and mortality. A severe heat wave killed over 1,200 individuals in Karachi in 2015 (BBC News, 2015). Temperature will continue to rise up by 3-4 degree Celsius by 2050 in the country, as assessed by World Bank, 2019.

Secondly, Pakistan suffers from severe water scarcity. It has reduced per capita water availability from 5,600 cubic meters in 1950 to 1,000 cubic meters in 2020 (WAPDA, 2020). Climate change intensifies droughts, which can destroy agriculture and food security. The 2001 drought in Pakistan reduced wheat production by 10%, threatening food security (FAO, 2002).

Thirdly, the state is susceptible to floods because extreme events resulting from climate change have the increased frequency and intensity. In 2010, over 20 million were affected, while the loss had reached $10 billion according to NDMA (2010). The GLOFs also contribute to huge risks. According to Dawn (2017), GLOF Hunza Valley forced thousands to evacuate in 2017.

Fourthly, the Coastal areas of Pakistan are vulnerable to sea-level rise. According to IPCC, by 2100, the sea level will rise by 60 cm. Saltwater intrusion and coastal erosion will affect agriculture, infrastructure, and human settlements. The coastal town of Thatta has faced serious erosion, displacing hundreds of families (Imran, 2022).

Fifth, Climate change affects Pakistan's agriculture sector, with changing precipitation patterns, increasing temperatures, and increased extreme weather events. Wheat production was decreased by 10% in 2020 because of heat waves and droughts (Ministry of National Food Security, 2020). This is a threat to food security, especially for vulnerable populations.

Moreover, Climate change is forcing human migration and displacement in Pakistan, especially in rural areas. Almost 20 million people were displaced in the 2010 floods. They are still in temporary settlements (IDMC, 2019). Climate migration will keep accesslerating, which means more pressure on urban resources and infrastructure.

Moreover, climate change has significant economic implications for Pakistan. According to World Bank, in 2019, losses owing to climate change are running into 3-4% of GDP annually. Health impacts related to climate change such as heat stress, respiratory diseases, and vector-borne illnesses also have a huge impact on the health sector. Economic and health costs of climate change are likely to increase further and exacerbate existing development challenges.

Apart from these, Warming allows the growth of malaria and dengue fever cases and water-borne diseases because of extreme weather conditions. It impacts mental health too, mainly for the vulnerable group.

Above all, it also impacts Pakistan's energy sector due to the increased temperature and variation in precipitation influences hydropower production. The highest increase in temperatures implies that the entire nation will demand more energy in terms of cooling, which stresses the national grid; so, resilient infrastructure in the climate will reduce this impact (Drexhage, 2008).

Last but not the least, socially the climate change impacts are closely related to Pakistan's rural communities and the traditional forms of livelihood under threat. The stressors posed by climate changes can lead to social unrest, migration, and even cultural disruption. Cultural heritage and the promotion of climate-resilient livelihoods would be essential elements in Pakistan for social cohesion.

Conclusion

In a nutshell, climate change threatens Pakistan's economy, food security, and human settlements due to increased high temperatures, violent weather events, and water scarcity. International cooperation, financial, technological, and capacity-building areas are very critical in this regard. Good governance, climate justice, and equity are the important factors that would be absolutely necessary for all effective and sustainable climate change mitigations and adoptions. Pakistan needs climate resilient infrastructure in development planning with significant agriculture and water management. In this respect, collective work is needed internationally and domestically to address issues of climate. The developed countries have to accept that they are at fault for contributing to greenhouse gases and need to provide support suitable to the demands of developing countries like Pakistan. Together, developed and developing countries can reduce vulnerability in Pakistan and other developing countries that occur owing to climate change. This demands concerted and sustained efforts by governments, international organizations, and civil society. Only through joint action countries can hope for the mitigation of the effects of climate change for a bright and sustainable future of all. Climate change is a global issue that requires a global solution.

Recommendations

The following stringent measures are sufficient to tackle the climate change challenges and implications:

Financial Aid and Technology sharing: Developed countries can play a vital role in supporting developing countries like Pakistan by providing financial assistance and transferring climate-friendly technologies. This can help Pakistan shift to renewable energy sources, increase energy efficiency, and build climate-resilient infrastructure. The GCF is an example of a platform that can facilitate climate finance flows to developing countries.

Capacity Building and Knowledge Sharing: To benefit developed countries and enhance Pakistan's capacities to counter climate change through sharing the expertise and information generated, Pakistan can be shared with knowledge and training schemes, such as workshops or conferences for climate change and agriculture. As a matter of priority, UNDP is actually working in Pakistan to promote its capacities in climate-institution building.

Infrastructure to tackle climate changes: Richer nations can support Pakistan in adapting and developing climate-resilient agriculture such as precision agriculture, and agro forestry to enable

it to attain enhanced food security and resilience in agriculture against climate-related vagaries. IFAD supports and assists the country in advancing climate resilient agriculture.

Disaster Risk Reduction and Management: Developed countries can support Pakistan's efforts in enhancing its framework on DRRM. This would involve helping with the creation of early warning systems, emergency preparedness plans, and climate-resilient infrastructure. The UNDRR is currently working with Pakistan to help build up DRRM capacities.

Good governance to handle climate change: Pakistan has developed countries like support through strong climate change governance. Pakistan can be helped by its friends in developing the country's climate policies, laws, and institutions. Pakistan's environmental governance is currently undergoing upgrading with the UNEP, among other collaborating institutions.

Developed countries can help Pakistan: It can provide support in education and climate awareness through initiatives such as developing climate knowledge curricula, conducting mass awareness programs, and literacy programs. UNESCO is cooperating with Pakistan to aware people about climate change.

International Stakeholders Cooperation and Diplomacy: Cooperation with and diplomacy of the rich country is of highest priority to solve this global issue. They have the capability to make a positive difference better by endorsing the implementation of the Paris Agreement and by facilitating climate collaboration via international agencies such as the United Nations Framework Convention on Climate Change (UNFCCC)".

Climate Justice and Equity: Finally, developed countries should respect principles of climate justice and equity in their cooperation with developing countries like Pakistan. This would be through respecting historical responsibility for greenhouse gas emissions that developed countries have had as well as offering assistance with precise needs and priorities that developing countries may need. Climate Justice Network has been working to promote climate justice and equity in international climate policy.

By adopting all these stringent measures, developed countries could help play a critical role to assist Pakistan, and other developing countries, with respect to tackling the challenges posed by climate change

References

Ahsan A. (2022). Climate Change and its impacts in Pakistan, *Pakistan Today.*

Drexhage, J. (2008). Climate change and global governance. *International Institute for Sustainable Development (IISD)*.

Hussan, S. (2023). Impact of global warming and climate change on Pakistan. *Dawn*.

Imran, M. (2022). Climate change: A real threat to Pakistan, *The Express Tribune.*

Kopra, S. K. (2018). With Great Power Comes Great Climate Responsibility. *E-International Relations-blogs*.

Munir, M., Sultan, M. M., & Chaichi, A. A. (2023). The Impact of Great Power Politics on Mitigating the Challenges of Climate Change. *Pakistan Languages and Humanities Review, 7*(2), 669-679.

Tosun, J., & Peters, B. G. (2021). The politics of climate change: Domestic and international responses to a global challenge. *International Political Science Review, 42*(1), 3-15.

Zahid, A. (2023). Climate Change: an existential threat, *The Expres Tribune.*