



Climate Change and Displacement in Pakistan: Resettlement Policy Challenges and Multisectoral Impacts

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ABSTRACT

Pakistan is among the countries most vulnerable to climate change, experiencing severe impacts such as recurrent flooding, glacial melting, and droughts. These environmental crises have led to significant internal displacement, exposing gaps in resettlement policies and creating multifaceted health, economic stability, and social challenges. This review examines the state of resettlement policies in Pakistan, their adequacy in addressing climate-induced displacement, and the resulting impacts on affected populations. This article highlights critical shortcomings by analyzing existing frameworks and case studies and proposes actionable recommendations to develop sustainable and comprehensive resettlement strategies. The study concludes that displacement and climate change are interwoven and transpose a flood of challenges to Pakistan's development pathway. Its current form suggests that the policies for migration due to climate change are inadequate to respond to the multifaceted consequences of displacement. Therefore, the advanced policies from developed nations should be placed for sustainability.

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Introduction

Climate change can be described as one of the greatest global diverse changes of the 21st century influencing environmental systems and living standards (Khoso et al., 2024). Therefore, Pakistan is one of the top ten countries highly vulnerable to climate change and disposed to floods, droughts, GLOFs, and rising Sea levels (Khushi et al., 2024). These events disproportionately target migrant communities and thus force them into large-scale displacement with resultant emergent resettlement needs (Vighio, 2024). That is the main concern about Pakistan's resettlement policies considered to be still insufficient for addressing the future outcomes regarding climate-induced displacements. From this,

inadequate theories have led to emergent and unstructured methodologies that worsen the socioeconomic impacts on displaced populations (Vighio et al., 2024). The effects of climate change are not distributed evenly, with marginalized communities often enduring the most severe consequences. In Pakistan, migrant populations are particularly vulnerable, as climate-related disasters drive widespread displacement (Vighio, 2024). These displaced groups are often forced into insecure living environments, which heighten their susceptibility to a range of health, economic, and social challenges (Ahmed et al., 2021). Therefore, expressing relatively forceful resettlement policies that could be implemented successfully and could meet the affected and weak communities' needs which could fulfill short-term and long-term requirements for the affected communities. Inappropriately, Pakistan's resettlement strategies remain ineffective, with limited capacity to predict and address the difficulties of climate-induced displacement (Gul et al., 2023).

The lack of inclusive structured methodologies and theories has further exacerbated the socioeconomic impacts that experienced by displaced communities (Tesfaw, 2022). The vulnerable populations already face and struggle climate-related displacement disorders and raising important aspects of life, such as livelihoods, education, healthcare, and social connections (Askland et al., 2022). Nevertheless, health, economic, and social dimensions and the relationship between climate change, displacement, and resettlement in Pakistan, have not been observed appropriately (Maharaj, 2024).

This review influences the health, economic, and social challenges, explores the connection between Pakistan's climate change, displacement, and resettlement policies and the challenges faced by displaced populations, and evaluates the effectiveness of current strategies (Bisht, 2024). The proposed study aims to offer helpful recommendations for developing more reasonable and effective methods to modify through fundamentally analyzing existing policies and practices, and the outcomes of climate-induced displacement.

2. Review Literature

2.1 Climate-induced Displacement

Natural disasters are one of the major causes of displacement. Therefore, huge levels of displacement worldwide due to climate change and extreme weather events like flood cyclones and droughts become more common while growing stronger, leading to massive dislocation. The 2010 Pakistan floods displaced 20 million people while creating major socioeconomic complications in Pakistan (Kirsch et al., 2012). The vulnerability of communities continues to increase through disasters that affect low-income areas.

Furthermore, the slow decline from climate change requires residents to settle into long-term migration sequences, unlike natural disasters. The Intergovernmental Panel on Climate Change (IPCC) (2019) warns that reducing agricultural production caused by rising temperatures and revised rainfall will produce food scarcity that forces people to migrate. The challenge of farming in Pakistan's Sindh province has increased because of rising sea levels and saltwater intrusion leading people to migrate mainly to the city of Karachi (Iqbal & Mustafa 2020). Traditional herding groups in China's inner region faced displacement because of desertification according to (Salimjan, 2021).

2.2 Socioeconomic and health impacts of climate displacement

Displacement generates substantial financial fallout which produces major social difficulties. People who must leave their homes because of climate change experience extreme difficulties

that include joblessness along with poor housing quality starvation and limited medical services. A study conducted by (Resurrección et al., 2019) shows that people moving because of climate change mainly women and children often face increased risks of social segregation. Penning Rowsell et al., (2019) indicate that people residing in Pakistan's rural areas face multiple problems directing basic urban infrastructure when their regions experience flood disasters. Moreover, the impact of climate-based migration specifically targets low-income communities. Adults holding displaced status encounter challenges obtaining lasting employment opportunities together with economic discrimination. According to Wiegel (2023) South Asia and Saharan African rural climate migrants are characterized by poor wages and insecure job situations and often end up in informal labor markets. Climate change migration in Pakistan resulted in an expanding urban and rural income gap that places strain on the capacity of resident areas to handle population redistribution (Qasim et al., 2023; Javaid et al., 2024; Sibt-e-Ali et al., 2023).

The severe health risks associated with climate migration include malnutrition alongside illness outbreaks and mental health problems. Those living in temporary shelters or informal settlements often lack safe water, proper sanitation facilities, and medical assistance (Schwerdtle et al., 2020). Pakistan's flood-prone areas reported epidemics of diarrhea and respiratory disease outbreaks along with overcrowding combined with polluted water conditions at relief camps World Health Organization (WHO, 2022).

2.3 Policy and governance challenges

The global governance organization shows minimal reaction to climate migration issues. The United Nations Framework Convention on Climate Change (UNFCCC) recognizes climate-induced displacement as a top concern yet offers no enforceable system to protect climate migrants (McAdam, 2017). Pakistan shows implementation defects in its disaster response system because operations lack proper coordination and fail to deliver sustained support for affected citizens (Iqbal & Mustafa, 2020). Nevertheless, many climate migrants settle in urban slums where they face inadequate housing along with limited access to decent employment possibilities. Climate, migrants from Sindh and Balochistan now reside in informal settlements throughout Karachi and Lahore (Nouman & Shams, 2024). The literature indicates that rural dwellers displaced by climate change typically settle in poorly constructed peri-urban regions across China (Wu et al., 2013).

2.4 The role of hazard mapping and risk assessment

Hazard mapping represents a fundamental instrument that enhances both climate change displacement assessment and reduction efforts. Successful relocation plans need both socioeconomic indicators alongside climate risk data according to the studies of (Birkmann et al., 2015). Flood-prone districts including Umerkot in Pakistan demonstrate through their programs the vital role of participatory mapping in vulnerability reduction. Justice based on early planning of displacement issues and resilience strengthening exists due to such policy instruments.

3. Methodology

This research is in line with secondary analysis using a literature review as a source. Therefore, the research highlighted the main themes including Climate Change, displacement, resettlement policies, Economic disparities as well as health impacts of climate change and displacement as key words. Besides that, the database used for the research included academic articles (Scopus, Elsevier, Research gate), government reports, policy

documents, and case studies on climate change and displacement in Pakistan. Examining the literature theoretically, the following main themes emerged under the analysis of the main challenges and effects of resettlement. In this context, simple based on perspectives and data that spot the most often-used terms and ideas in the literature. The research included 33 articles including reports to support results. Lastly, the data collected from different sources are put scientifically.

3. Results and Discussions

3.1 Resettlement Policy Challenges in Pakistan

Migration and associated policies have been the major concerns in developing nations specifically in Pakistan encountering multiple challenges that create obstacles in implementation. These issues stem from inadequacies in policy design, weak institutional capacity, and complex socio-political dynamics. In addition to that, the country is facing challenges regarding natural disasters and also certain flaws in developmental projects in the current scenario.

3.1.2 Fragmented Policy Framework

Policies regarding resettlement in Pakistan mostly lack the frameworks comprehensively. Resulting incorporative distributions in management, and planning and further creating issues in development (Khwaja, 2021). Because of the situation specifically poor management and structured policies, the country is increasing negative approaches that result in unemployment, disputes, unequal distribution, and landlessness. The absence of clear legislative guidelines exacerbates the vulnerabilities of displaced communities, leaving them exposed to long-term socio-economic challenges (Attri, 2023).

3.1.3 Institutional Capacity and Governance Issues

Most of the time, Feeble administration structures, as well as institutional barriers, importantly impact the resettlement efforts taken by the government creating a big flaw in the economic situation of Pakistan. Bureaucratic inefficiencies, lack of inter-agency coordination, and poor enforcement mechanisms delay the implementation of resettlement programs (Ibrahim et al., 2022). These concerns lead to the mismanagement and lack of trust in government from the public and related initiatives.

3.1.4 Neglect of Socio-Cultural Factors

Resettlement initiatives in Pakistan often overlook the socio-cultural dynamics of affected populations (Iqbal et al., 2025). Displacement of local people often disturbs the bonding between communities as well as traditional practices including social networks, kinship, trust, and reciprocity, which have been considered the important for well-being of diverse rural communities as well as groups of vulnerable households. (Rafiq et al., 2024). Where failure seemed to be the major concern leading to hindrances in achieving resettlement projects and sustainable development.

3.1.5 Inadequate Compensation Mechanisms

Economic displacement poses a significant challenge, as compensation for affected individuals often falls short of addressing their actual losses. Delays in compensation, undervaluation of assets, and lack of transparency in the process exacerbate the economic hardships of displaced communities (Nikuze, 2022). Such deficiencies prevent affected households from achieving sustainable recovery and perpetuate cycles of poverty.

3.1.6 Environmental and Disaster-Related Challenges

Pakistan's high vulnerability to climate-induced disasters, such as floods and earthquakes, complicates resettlement efforts (Farha et al., 2023). Frequent occurrences of natural disasters lead to repeated displacement, making it difficult to develop and implement long-term solutions. Environmental degradation and land use changes further reduce the availability of suitable areas for resettlement (Islam, 2023).

3.1.7 Political and Legal Barriers

Political interference and the lack of legal protections for displaced populations pose significant barriers to effective resettlement (Muzamil, 2021). Displaced persons often face exclusion from decision-making processes, leaving their needs unaddressed. Moreover, the absence of legal recognition for informal settlements creates additional hurdles for urban resettlement programs.

As stated above, there are major policy gaps in climate-induced resettlement. It is indicated that Pakistan still does not have a fully developed and clear strategy concerning the issue of climate-induced displacement. The earlier National Climate Change Policy (NCCP) as formulated by the government in 2012 and the National Disaster Management Plan (NDMP) do not give much consideration to resettlement as it would be in the line of developing a plan for the catastrophe but not more on the lines of the catastrophe's resolution. Affected people experience slow compensation, poor shelter, and restricted service provision.

3.2 Economic Challenges

Displaced persons are forced to bear high levels of livelihood risks that are especially prevalent in agricultural-based areas (Shrestha, 2024). Resettlement neighborhoods do not create economically productive jobs, and the work opportunities are inadequate to propel individuals to transition from poverty to a better life or to move to other areas seeking a better life, this degrades poverty cycles (Etzold et al., 2024). Displaced individuals, particularly in agricultural regions, face severe livelihood challenges as displacement disrupts access to land, water, and essential resources, leading to immediate economic instability (Kett, 2004). Often the lack of infrastructure, economic opportunities, and access to services, resettlement communities in poverty with limited prospects for improvement (Downing et al., 2021). Poorly planned resettlement sites, normally situated in remote areas, fail to provide sustainable job opportunities or access to economic hubs, and set up individuals in cycles of poverty and dependency (Lu & Zhang, 2024). Women and other marginalized groups faced a lack of resource access, barriers to employment, and intensified discrimination (Mostafa, 2025). The failure to secure stable income also limits mobility, as displaced persons often cannot afford to relocate to areas with better opportunities. Furthermore, the deficiency of social networks and community consistency in resettlement areas reduces mutual support, making it difficult for individuals to rebuild their livelihoods (Ma et al., 2024). To address

these challenges, resettlement policies should combine livelihood restoration programs, vocational training, access to credit, and gender-sensitive policies while ensuring adequate infrastructure and connectivity to economic centers.

3.3. Health Impacts

Climate events always result in people displacement, and this hurts their access to healthcare services and leads to increased morbidity and mortality (Cazabat, 2022). Food contamination in and around these camps leads to infections from waterborne diseases due to poor hygiene standards in the shelters, and mental ailments such as anxiety and depression are also not well managed in the camps. Forced displacement often leads to the division of communities, weakening traditional social support systems (Kuhnt et al., 2017). Resettlement programs rarely consider the cultural and social dimensions of displacement, leading to a loss of identity and a sense of belonging among affected populations (Mohamed, 2024). Health infrastructures received a lion's share in investment among all the infrastructures in the world. There is a need to maintain focused and gradually build up the capacity of health care services in the resettlement regions. Health care centres on wheels, counselors, and water treatment plants should be focused on since they help to enhance the lives of the affected persons (Terminski, 2014). Health infrastructure, despite being a significant focus of global investment, often falls short of addressing the specific needs of displaced populations. Nevertheless, the overpopulation, standard living conditions, and shortage of clean drinking water create a big hurdle specifically highlighting the diverse diseases associated with health. The healthcare services available in these regions frequently lack the necessary resources, facilities, and personnel to manage the increased demand effectively (Few et al., 2021). To recognize these issues and addressing, it is important well note that, the initiatives should be considered by the government in connection with a positive approach for displaced communities in sustainability. Mobile health units, or "health care on wheels," can play a vital role in delivering essential medical services to remote or underserved resettlement areas. Mental health therapy should also be incorporated into these services to help displaced individuals cope with trauma and stress. Access to clean water is another serious issue in resettlement areas. Installing water treatment plants and improving sanitation infrastructure can significantly improve public health by reducing the occurrence of waterborne illnesses (Phiri et al., 2023). Such measures not only mitigate instant health risks but also contribute to a better quality of life and a sense of security for affected populations. A comprehensive method that incorporates physical and social infrastructure improvements can strengthen the overall well-being of displaced communities (Aziz et al., 2022). By focusing on health care delivery, support, health, and clean water approaches, resettlement programs can address the various challenges faced by displaced individuals and foster long-term resistance and community stability.

4. Conclusion

Displacement and climate change are connected and transpose a flood of challenges to Pakistan's development path. Its current form suggests that the policies for migration due to climate change are inadequate to respond to the multifaceted consequences of displacement. Holistically, health economic, and social losses are all the effects that need addressing to prevent acute and chronic ones so that refugees can access sustainable impacts. In this regard, Pakistan can work hard to address these challenges to have a mechanism that supports climate change and social economic justice. Therefore, the impact of IDP and forced migration should also take into account the short-term physical and psychological and the

long-term physical, economic, and social factors for implementing the improvement of sustainability and health of the forced-migrated populations.

4.1 Recommendations

Some of the specific recommendations that have been made for the development of comprehensive resettlement policy include but are not limited to the following. The government should start working on the development of a National Resettlement Policy Framework showing the government's commitment to Climate Change Resilience and Sustainable development. This policy has to factor in, housing, source of income or employment, and reconstruction of communities.

4.2 Limitations of the study

The study is review-based in nature and is conducted by various sources. However, the study has certain limitations. The study could contribute more in relation to primary base research. Besides that, the study would contribute and play more significant roles in connection with the interviews conducted on large parameters. Another concern regarding the study would further highlight certain recommendations if it is connected officially.

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