

Perspective

ENVISIONING A RESILIENT PAKISTAN: GENDER, INTERSECTIONALITY AND DISASTER RISK REDUCTION

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According to the United Nations Office for Disaster Risk Reduction (UNDRR), approximately 90% of climate-related deaths occur in poorer/developing countries, underscoring the urgent need for effective adaptation and risk reduction efforts (UNDRR, 2021). Adversities of climate change in Pakistan—a nation in south Asia with ~241 million people—are not a news now! Pakistan, frequently hit by several natural hazards including floods, droughts, earthquakes, and extreme heatwaves, is a country that is highly vulnerable to various disasters (Khoshnazar et al., 2023). The country's geographical diversity also contributes to its vulnerability to natural hazards. Consequently, the nation is often cited to be among the top ten countries most vulnerable to climate change, frequently experiencing devastating damages in terms of social impacts, economic adversities, and long-lasting infrastructural disruptions. For instance, the catastrophic floods of 2022 displaced millions and caused extensive damage to infrastructure and livelihoods across Pakistan (Akhtar et al., 2023). Historical events, including the 2005 earthquake and the 2010 floods, have further exposed systemic vulnerabilities in disaster preparedness and response in Pakistan.

Notably, the situation of climate-related threats is exacerbated by Pakistan's socio-economic context. Poverty, weak infrastructure, and a lack of resources hinder effective disaster response. The socio-economic impacts of such frequent and large-scale disasters are profound, particularly for marginalized groups, including women and other inter-sectionally disadvantaged communities. Moreover, there is a significant gap in high-resolution disaster risks and resilience information at both national and sub-national levels, which impedes informed planning and decision-making. Given such circumstances, high-resolution investigations looking at spatial-temporal patterns of hazards, vulnerabilities, and risks are imperative to assure effective disaster risk reduction (DRR) efforts. Connectedly, understanding the interplay of gender and intersectionality in DRR planning is also essential for fostering resilience in Pakistan. As highlighted by Sajjad (2021), building disaster-resilient communities requires inclusive as well as operative resilience frameworks that enable factual decision-making and resource allocation across various scales. However, despite the onset of frequent extreme disaster events in Pakistan, there is a notable lack of comprehensive disaster resilience assessments at both national and sub-national levels, hindering effective planning and resource allocation in the context of disaster risk management.

Role of intersectionality and gender in disaster scenarios

Intersectionality is a critical framework for understanding how various social identities—such as gender, class, ethnicity, and disability—intersect to create unique experiences of disadvantage in disaster contexts (Kadetz and Mock, 2018). Marginalized groups often face compounded risks due to systemic inequalities. Women, children, the elderly, and people with disabilities are disproportionately affected by disasters due to pre-existing social inequities. For instance, women with disabilities encounter significant barriers when accessing emergency services or shelters during disasters (Gartrell et al., 2020). Cultural restrictions may further limit their mobility or decision-making power within households. Additionally, socio-economic factors play a crucial role; women from lower-income backgrounds often lack the financial resources necessary for effective disaster preparedness. Engaging women and marginalized groups in the planning and implementation of DRR initiatives ensures that their voices are heard and their needs are met. Community-based disaster risk management programs have demonstrated success by involving local populations in identifying risks and developing response plans tailored to their specific contexts. Similarly, empowering women through training in disaster preparedness and response can significantly enhance community resilience. Programs designed to build leadership skills among women have proven effective in improving community responses during disasters. Women leaders often advocate for the needs of marginalized groups, ensuring equitable distribution of resources.

Gender plays a critical role in shaping individuals' experiences during disasters. Women often face heightened risks due to pre-existing socio-economic inequalities, cultural norms, and limited access to resources. For instance, women are frequently excluded from decision-making processes related to disaster management, which affects their ability to recover post-disaster. From another point of view, disasters further exacerbate gender inequalities; women often suffer more from loss of livelihoods and increased domestic burdens post-disaster. They frequently manage household tasks under challenging conditions while caring for children and the elderly. Gender roles can further limit women's access to resources and decision-making in disaster management. Women face significant barriers in accessing food, markets, and relief services during disasters, as access to local markets diminishes sharply during emergencies. Being an integral part of community, women struggling with such barriers compromise overall community resilience to disasters.

Fostering inclusive resilience building and enhancing strategies for resilient Pakistan

To effectively address the existing challenges, it is essential to adopt inclusive strategies that integrate gender and intersectional perspectives into DRR planning. As noted by Sajjad et al. (2023), community disaster resilience varies significantly across regions in Pakistan. Their study identifies spatial disparities in resilience during the period from 2004 to 2014, revealing that certain areas have become less resilient over time. This highlights the necessity for a gender-sensitive approach to DRR that acknowledges these disparities. Hence, developing policies that explicitly address the needs of diverse groups is crucial. This includes ensuring representation of women and marginalized communities in

decision-making processes at all levels. Integrating gender perspectives into DRR policies must explicitly incorporate gender analysis at all levels (Smyth and Sweetman 2015). One potential way of doing so could be developing indicators that reflect the diverse experiences of affected populations and ensuring that women participate in decision-making processes related to disaster management. However, achieving this necessitates collecting and analyzing data disaggregated by gender, age, disability, and other relevant factors, which could inform targeted interventions and resource allocation.

From this perspective, investing in research that disaggregates data by gender and other intersecting factors of communities could progressively assist in understanding the underlying vulnerabilities. Such data can further inform targeted interferences that address the specific needs of marginalized communities during disasters, and could include:

Community-Based Approaches: Empowering local communities through education, training, and resources, which will help build resilience from the ground up. Furthermore, recognizing indigenous knowledge and practices is also essential for sustainable DRR.

Capacity Building: Conducting gender-sensitive training for disaster management personnel will raise awareness about the unique needs of marginalized groups during disasters.

Collaborative Efforts: Fostering partnerships between government agencies, non-governmental organizations (NGOs), academic institutions, and international bodies will create a cohesive DRR strategy.

The importance of the above-mentioned strategies is reinforced by findings from Sajjad et al. (2024), which highlight significant gaps in health facilities across districts in Punjab during emergencies like COVID-19. The study demonstrates that approximately 45% of indicators related to health systems achieve below-average scores, indicating a lack of essential services during crises. Hence, focusing and addressing those low performing indicators and incorporating intersectionality into action plans could help enhance the overall community resilience.

As noted, while women play crucial roles in community resilience and recovery efforts, their involvement is essential for effective DRR strategies. Policies that empower women along with other intersectional aspects contribute not only to overall community resilience but also lead to better outcomes for all community members (Le Masson 2016). Hence, effective disaster resilience strategies must integrate gender and intersectional perspectives to address the unique needs of diverse populations. Taking a "*System-of-Systems*" approach towards resilience ensures that intersectionality is considered in assessments and interventions. By recognizing how different identities interact with existing vulnerabilities, policymakers can develop more effective and efficient DRR strategies that empower marginalized groups.

As we envision a resilient Pakistan capable of withstanding future disasters, it is essential to prioritize intersectionality and gender equity within disaster risk reduction frameworks. By recognizing the unique challenges faced by marginalized groups and integrating their perspectives into planning processes, we can build a more inclusive society better prepared for the impacts of climate change. In conclusion, incorporating gender and intersectionality into DRR efforts will enhance Pakistan's resilience against disasters while ensuring that no one is left behind. It is only through such inclusive strategies that we can envision a truly resilient Pakistan capable of facing future challenges head-on.

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