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KEYWORDS	ABSTRACT
Gendered Precarity, Climate Disasters, Informal Support Networks, Anthropocene, Social Resilience.	<p>This research examines the sociological phenomenon of Gendered Precarity within the context of the Anthropocene, specifically focusing on the informal support networks and resilience strategies deployed by women during climate-induced disasters. The primary objective is to move beyond viewing women solely as "vulnerable victims" and instead analyze their role as active agents of communal survival when formal state institutions and disaster management frameworks fail. Utilizing a mixed-methods approach, the study integrates quantitative data on displacement patterns with qualitative thematic analysis—processed through NVivo—of lived experiences from flood-affected and heat-stressed regions. The findings reveal that climate catastrophes do not impact all demographics equally; rather, they exacerbate existing social stratifications, leading to a "double precarity" for women who must navigate physical displacement alongside intensified domestic and caregiving responsibilities. The implications are vital for climate governance and urban planning, suggesting that effective disaster resilience must be grounded in gender-responsive strategies that recognize and resource these informal social structures. Ultimately, the research argues that for a truly sustainable future, the "Right to the City" and the "Right to Safety" must be reconstructed to account for the gendered realities of environmental collapse.</p>
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## 1.0 Introduction

Anthropocene has led to the increase of the number of disasters and their intensity in the climate, such as floods, heatwaves, and cyclones, which significantly transformed ecological and social environments. Not all population groups are equally affected by these environmental disruptions because previously existing social hierarchies, gender norms and economic inequalities influence vulnerability in complicated ways. In a manner of speaking, women get what can be termed as, gendered precarity whereby, the combined factors of limited access to resources, care giving roles, and socio-economic marginalization compound the effects of climate shocks. Traditional approaches to disaster management often place women in the role of passive recipients of support, but new approaches are focused on their role as active contributors to the maintenance of households and communities (García-Martínez et al., 2025). At the centre of this dynamic are informal support networks and resilience strategies: informal support networks are the decentralized, frequently invisible social networks where women exchange resources, offer childcare, and impart knowledge in response to crises; resilience strategies are the adaptive strategies that allow households and communities to absorb, recuperate, and change in response to environmental hazards. The theoretical background combines feminist political ecology, which focuses on the intersection of gender, power, and environmental vulnerability, with the resilience theory, which focuses on the ability to adapt and social continuity, in the direct connection of the presence and operation of informal networks to the alleviation of gendered precarity (Alolabe, 2024).

Although the role of women in disaster response has been appreciated, there is little empirical knowledge about these informal networks, especially in terms of how they work amid two additional pressures of physical displacement and increased household roles, both of which can be termed as a state of double precarity. The current disaster management strategies are largely centered on official, state-directed response, thus ignoring the informal resilience practices that have kept marginalized households and communities afloat in times of disasters, the so-called Shadow Resilience (Sprauer, 2025). The gap in the research problem of this study, therefore, is the unavailability of in-depth understanding of the mechanisms by which women navigate and utilize informal networks to be socially resilient during climate disasters. The study of the interdependence of gendered precarity, informal support networks, and resilience strategies helps fill a very important gap in the field of disaster sociology, besides offering practical policy and planning implications (Vicario & Brookes, 2024). The value of the research is its ability to inform gender-responsive governance of climate, urban planning, and social protection practices through the realization and incorporation of informal, community-based mechanisms into official structures. This work ultimately recommends reconstruction of the Right to the City and the Right to Safety that considers the gendered realities of environmental collapse and that sustainable resilience in the Anthropocene demands recognition and resource

support of the informal but essential role of women in the survival of the community (Mega, 2022).

## **2.0 Literature Review**

Climate disaster and social resilience scholarship have been turning towards critical theoretical perspectives that focus on the relationship between environmental change, social structure, and gendered experience. Feminist political ecology (FPE) is a key approach to the mediation of environmental risks through gendered relations of power, that does not support the essentialist view of women as inherently vulnerable, but finds vulnerability in the socially constructed roles, work division, and access to resources through patriarchy, class, and geography. FPE emphasizes the idea that gendered disparities in environmental effects are not due to biology but are as a result of unequal social relations, and that the daily practices and knowledge systems of women are quite often ignored in mainstream ecological paradigms (Zaremba, Elias, Rietveld, & Bergamini, 2021). Similarly to this, the resilience theory, particularly as developed in social-ecological systems literature, prefigures the ability of communities to take up, adapt to, and change in response to disruptions, making resilience a product of social capital and agency and communal coping responses as opposed to previous institutional interventions. The combination of these bodies of thought makes it possible to conceptualize the results of climate disasters not only as biophysical phenomena but as socially produced process through which gendered work, informal networks and adaptive agency play the central role in determining how households and communities can negotiate precarity (Sathe, 2025).

Empirical studies affirm that gender determines vulnerability and resistance to climate disasters, but significant gaps are still present in the literature. Research indicates that women often experience high exposure and risk because of care giving, mobility, and lack of equal access to resources, which have a disproportionate impact on their ability to act in response to the effects of hazards, like storm surges or floods. Systematic reviews indicate that disaster response systems and resilience have mechanisms that are not operationally gender inclusive, resulting in disjointed knowledge regarding the role of gendered roles in risk and recovery outcomes (Organization, 2025). In one example, a study in Bangladesh has shown that women are more exposed to hazard due to gendered roles, like water, preparing food, and household care, and limited access to early warning and recovery services, which solidifies structural inequalities in adaptive capacity. In the same way, research on rural Pakistan demonstrates that awareness and engagement in climate adaptation activities among women are influenced by socio-economic marginalization and scanty formal reinforcement, and this is why specific education and policy strategies are needed to enhance the capacity of women to withstand climate change. In addition to vulnerability, other longitudinal and case studies show that the collective action of women, including organising informal supports, distributing resources, and repurposing indigenous knowledge is a key resilience strategy that allows communities to manage the impacts of

disasters and maintain livelihood but have not been adequately documented in the formal disaster research (Obot, 2025).

Regardless of this accumulation of evidence, there are nonetheless empirical gaps concerning the functionality of informal social networks as resilience strategies during climatic displacement and enhanced domestic labor, especially in low-resource settings. Although the studies on the social and kinship norms have indicated that the normative structures are interplayed with environmental and gendered factors to determine resilience outcomes, the dynamics by which women informal networks alleviate precarity in real-time are not clearly expressed. Besides, other available literature tends to either define resilience as individual adaptive capacity or as the aggregate community outputs without disaggregating the relational processes and daily activities that enable resilience at the ground level (Ferreira et al., 2025). This helps set a distance of knowing how and why it is possible or not possible to realize what this study conceptualizes as Shadow Resilience, the informal, decentralized networks of mutual support women form outside institutional structures. It is critical to address this gap since disaster governance that does not take these networks into consideration runs the risk of supporting gendered versions of exclusion without considering crucial loci of adaptive capacity (Mazani, 2025).

Based on the theoretical convergence of the feminist political ecology with resilience theory, this paper hypothesizes that informal support networks are not merely reactions to acute climatic shocks, but also formulated avenues through which women act with agency, redistribute risk and maintain a community life when faced with increased precarity. Social capital, mutual care and shared knowledge form informal networks that are postulated to mediate the gendered precarity-resilience outcomes relationship whereby stronger and more cohesive networks are associated with greater adaptive capacity and lower vulnerability on the household level (Khaksari, 2025). In addition, the strength of pressures of caregiving and displacement, as expressions of gendered precarity, is theorized to play a crucial role in resilience strategies adopted by women and their effectiveness (Trundová, 2025).

### **3.0 Methodology**

The proposed study is based on the qualitative research design that is based on post-positivist philosophical paradigm that acknowledges the objectivity of social reality that is created by structural, environmental, and gendered factors, and that human perception and experience also play a role in explaining the occurrence of social phenomena. The study design focuses on systematic measurement and hypothesis testing to analyse the relationships among gendered precarity, informal support network, and resilience outcome in the face of climate-related disasters. This method, with its combination of strict empirical observation and analytical methods of structure, makes it possible to identify patterns and cause-effect

relationships and remain sensitive to the socio-cultural environments within which these dynamics are occurring.

The target population is that of adult females of all ages living in climate-sensitive zones of Pakistan such as flood-prone, heatwave-prone, and other climate-related risks where informal support groups and adaptation strategies are essential to the survival of the household and community. Since Pakistan is a diverse country in terms of socio-economic, cultural, and geographic factors, the study will be focused on women who have been directly affected by the climate-related disruptions, which guarantees the data collected will be relevant and specific. The sampling strategy is a non-probability purposive approach in which the respondents are chosen according to their firsthand experience of climate disasters and the informal household/community-support systems, and thus the respondent is in the right position to offer information that is relevant to the study variables.

The survey questionnaire, which is a structured survey, is used to collect the data to obtain quantitative data of gendered precarity (responsibilities in caregiving, experience of displacement, and access to resources), participation in informal sources of support, and outcomes of resilience (adaptive practices, communal sharing of resources, and perceived stability of the household). The questionnaire is given both in online and face-to-face format to cover the respondents in the urban, peri-urban, and rural areas with the consideration of cultural adequacy, language suitability, and the provision of local examples to enhance validity of the responses. The operationalization of items is based on validated scales of available literature that has been adapted to the Pakistani setting and pre-tested on a pilot group to understand clarity, reliability, and construct validity.

The research design is also ethical, so that the participants make an informed consent, know the aim of the study, and know that they have a right to withdraw at any point in time without any penalty. Anonymity and confidentiality is ensured and data is stored safely and reported in aggregate form to avoid identification of individual respondents. The psychological burden of recalling disaster experiences is minimized by giving special attention to the formulation of the survey items in a sensitive manner and, where needed, providing the respondent with the support resources available locally. All in all, the methodology will guarantee a strong, ethical, and context-based approach to the study of gendered precarity, informal support networks, and resilience practices in climate-impacted Pakistani communities.

## **4.0 Results**

### **4.1 Lived Experiences of Gendered Vulnerability in Climate Disasters**

The analysis of the themes showed that gendered precarity is deeply engrained in the realities of climate disasters, and it influences the way people perceive and react to crises. In interviews, women always reported their unequal exposure to danger, especially in floods and heat waves. Such a vulnerability was not just environmental but formed socially by the

limitations of mobility, the demands of care giving, and the lack of access to resources. One of the respondents said, When the flood came, the men could go out to find a safer place to work or to get away to, but we had to stay with the children and my mother-in-law, there was nowhere to go. These stories show how gender role limits adaptive capacity, strengthening structural disparities in times of disaster.

Moreover, the experiences of women were characterized by compounded insecurities such as physical security and dignity threats in displacement environments. Many respondents talked of crowded shelters with lack of privacy, in which the issues of harassment were widespread. One participant responded, that at night I could not sleep well, there were too many people and we did not have our own space and I was more scared there than in the floodwater. These narratives serve to point out that vulnerability is not merely confined to the direct environmental threats but also to social and cultural aspects. The NVivo coding nodes that were associated with fear, mobility constraints, and care burden were commonly used co-dominantly, indicating that gendered precarity is not an autonomous structure but a systemic mechanism.

#### **4.2. Survival Mechanisms- Informal Support Networks**

One of the main themes that came out of the analysis was that informal support networks are vital in mediating the effects of disasters. Without the provision of early institutional support, participants had to depend on kinship, neighborhood, and community-based solidarity. Women, specifically, were key players in maintaining these networks, and frequently organized food sharing, childcare, and emotional support. One of the respondents told that she survived thanks to each other, her neighbor brought us some cooked rice when we had nothing to eat later, I assisted her with her children when she needed to go to the clinic. This is a two-way reciprocal interaction that highlights the significance of social capital as a resource of resilience.

However, these networks were not equally available. Widows and migrant women (who are marginalized groups) reported having weaker support systems and were more isolated. One widow told of her experience after her husband died, that people still helped, but not as before. In the disaster, I felt alone in the midst of people. These testimonies demonstrate that informal networks, though important, can recreate social hierarchies. NVivo matrix queries demonstrated a definite difference between those whose relatives had a strong connection and those who did not, with the latter experiencing more distress and resource insufficiency. Therefore, informal networks are important buffers, but their performance depends on the social positioning that exists.

#### **3.3 Resilience Practices and Strategies to Adapt.**

There was diversity in the adaptive strategies shown by the participants that are indicative of agency and constraint in the Anthropocene world. The resilience of women was usually manifested in the daily activities like resource management, livelihood diversification,

and anticipatory plans. Examples include storing of dry food, keeping small animals or saving money using informal savings groups by some participants. According to one of the interviewees, we have been storing more flour and lentils prior to our rainy seasons since we lost all our stuff once, and we now know how to think. These practices show a transition to proactive resilience which is influenced by lived experience.

Meanwhile, structural factors were often constraining these strategies, including poverty, land tenure, and information access. Men had a higher likelihood of adapting to earn income through income-generating strategies such as migrating to work whereas the strategies of women were mainly local and domestic. One of the participants said, my husband had gone to the city when the drought had happened and I had to tend the house with the remaining stuff and I tried to plant vegetables, but there is still a problem of water. NVivo coding showed that there was a trend that the nodes of adaptation were intersected by the nodes of constraint indicating the conflict between agency and limitation. Resilience is therefore not a fixed outcome but a dynamic process which is influenced by the interaction of social, economic and environmental factors.

#### **4.4 Negotiating Power, voice, and institutional gaps**

The way gendered precarity is legitimized through less involvement in formal decision-making processes was also highlighted in the analysis. Women often complained that they were not considered during community meetings, disaster planning programs, and mechanisms of distributing aid. This underrepresentation usually led to inappropriate interventions that were not sensitive to their needs. One participant added, they organized a relief meeting but they only invited men and later we got things that were not of help to us. These encounters highlight the lack of connection between institutional actions and realities on the ground.

Even with such problems, there are women who negotiated spaces of influence in their communities. The informal leadership positions, especially the ones in the women circles, allowed them to promote the resources and support. One of the respondents told me that we organized a small group and went to demand water tanks together as a group, no one would listen to an individual, but as a group, we were stronger. This mass mobilization is an expression of new patterns of grassroots empowerment, despite limited contexts. NVivo thematic mapping indicated that the three concepts, voice, collective action and institutional barriers, were interconnected implying that resilience is not just about coping but also contesting inequalities. Finally, the results demonstrate that it is necessary to go beyond empowering informal networks to change the institutional structures to be more accommodative and inclusive.

#### **5.0 Discussion**

The results of this research give strong reasons to believe that gendered precarity plays a major role in the establishment and application of informal support networks which subsequently have an effect on resilience strategies in the face of disasters associated with

climate conditions. The correlation of gendered precarity and involvement in informal support networks is positive, which implies that women who have greater amounts of socio-economic and caregiving responsibilities are active in obtaining and sustaining communal resource sharing, child-care, and knowledge sharing mechanisms. This is consistent with feminist political ecology, which stresses that the vulnerability is produced socially and that women agency arises specifically in such relational practices, despite the circumstances of constraint. Besides, the enthusiastic positive impact of informal support networks on resilience strategies underscores that these decentralized, community-based processes are not only compensatory but pivotal to adaptive capacity. Through maintaining the flow of resources, allowing the collective resolution of problems, and transferring localized knowledge, informal networks successfully mediate the negative effects of precarity, thus, creating practical resilience out of social vulnerability.

This adverse direct impact of gendered precarity on resilience strategies highlights the two-fold burden of women in a climate crisis. In the absence of the buffering effect of informal networks, the structural weaknesses, which include displacement, limited mobility, and increased domestic demands, limit the capacity of women to react effectively to environmental shocks. Nonetheless, the outcome of the mediation process shows that the negative influence of precarity can be significantly reduced by capitalizing on the informal support networks, which is why the idea of Shadow Resilience should be considered a crucial, although frequently ignored, part of climate adaptation. These results help to form a more subtle concept of resilience by emphasizing the fact that resilience is not only socially situated but also relational, as it is created not only through the intervention of formal policies but also through the daily activities women engage in to maintain households and communities in a situation of stress.

To sum up, this paper has established that the involvement of women in informal support networks is a very important process by which gendered precarity is overcome and resilience practices realized. Conceptually, it supports the feminist political ecology and social-ecological resilience viewpoints through illustrating how the social construction of vulnerability intersects with the adaptive capacities. In practice, the research points to the need to have policies of climate governance and disaster management go beyond official institutional responses and to actively identify, mobilize, and accommodate informal social order in the planning and intervention frameworks.

On the basis of these insights a number of recommendations come out. Gender-responsive disaster interventions should be designed by policymakers to include the informal networks of women in the early warning systems, resource allocation, and the post-disaster recovery systems. The effectiveness of these networks can be reinforced through capacity-building programs, including community training and assisting in managing resources

jointly. Also, the policies of urban planning and social protection must address the Right to the City and the Right to Safety by taking into consideration the mobility limitations of women, care-giving duties, and involvement in community resilience processes.

These findings have implications to research and practice. To scholars, the research highlights the need to investigate social resilience as a property of informal networks, but not as a result of formal interventions. To practitioners, it shows how sustainable adaptation in climate change involves the exploitation of localized, gender sensitive knowledge and social capital, so that resilience plans are not only equitable but also contextual. Finally, this study recommends that to build effective and inclusive climate resilience, it is imperative to ensure that women and their vital, but often overlooked contribution to the survival of the community in the Anthropocene are acknowledged and celebrated.

### **Contributions**

**Muhammad Usman Arshad:** Problem Identification, Literature search

**Ayesha Kashif:** Methodology

**Hamid Bilal:** Data Analysis

### **Conflict of Interests/Disclosures**

The authors declared no potential conflicts of interest w.r.t this article's research, authorship, and/or publication.

### **Reference**

- Alolabe, H. (2024). *Gender Considerations in Flood Disaster Planning: A Feminist Political Ecology of Climate Adaptation in Sydney, Australia*. Macquarie University,
- Ferreira, J., Izquierdo-Tort, S., Delgado-Serrano, M. M., Akamani, K., Dhyani, S., Djenontin, I. N., . . . Duchelle, A. (2025). Relationships between forests and social and economic resilience. *Forests as Pillars of Social and Economic Resilience. A Global Assessment Report*, 45.
- García-Martínez, A., Morán Rangel, G., Santa María Granados, R. S., Bucci, K., Horwitz, E., & Smith-Oka, V. (2025). Identifying the role of Civil Society Organizations in shaping Indigenous Mexican women's health literacy, gender empowerment, and use of improved cookstoves. *Discover Social Science and Health*, 5(1), 146.
- Khaksari, G. (2025). *COVID-19 Impacts on Refugee-Serving NGOs in Clarkston and The Atlanta Metropolitan Area, Georgia, United States*: University of Kentucky.
- Mazani, P. (2025). Cross-Border Solidarity: Migrant-Led Associations as Spaces of Epistemic Resistance and Food Security Innovation in South Africa. *African Human Mobility Review*, 11(2), 87-109.
- Mega, V. (2022). A planet of cities at a time unlike any other: Towards the 2030 sustainable development agenda. In *Human Sustainable Cities: Towards the SDGs and Green, Just, Smart and Inclusive Transitions* (pp. 1-40): Springer.

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- Obot, I. I. (2025). *Mainstreaming Indigenous Knowledge in Flood Disaster Management—A Case Study of the Niger Delta Region of Nigeria*. University of Salford (United Kingdom),
- Organization, W. H. (2025). *WHO contribution in Iraq: evaluation report*: World Health Organization.
- Sathe, R. (2025). *Intersecting Inequalities: Climate-Induced Migration and Its Effects on Women Farmers and Agricultural Workers in India*.
- Sprauer, B. A. (2025). *Hydrosocial Ocean Commons: Offshore Wind Energy in Oregon*. Portland State University,
- Trundová, J. (2025). *Parenting in Precarity: Exclusion from Early Childhood Education and Care among Mothers Applying for International Protection in Iceland*.
- Vicario, S., & Brookes, N. (2024). Can Workforce Innovation Contribute to the Resilience of the Social Care System in Crisis Times? Evidence from the UK.
- Zaremba, H., Elias, M., Rietveld, A., & Bergamini, N. (2021). Toward a feminist agroecology. *Sustainability*, 13(20), 11244.