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Editorial: Inclusion in climate-related disaster studies

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Editorial on the Research Topic

Inclusion in climate-related disaster studies

Evidence of projected impacts and risks associated with climate-related hazards shows increased exposure and vulnerability due to climate change (IPCC, 2022). These impacts and risks are observed worldwide, but are most apparent in the Global South, where populations are among the most vulnerable, affected and least prepared for the impending impacts of climate change (Sen Roy, 2018). These vulnerable populations are particularly impacted due to the constraints in their capacity to anticipate, cope with, resist and recover from the impacts of natural hazards (extreme natural events or processes) (Wisner et al., 2004, 2012). In addition, the devastating effects on these vulnerable populations are perpetuated by socioeconomic, political, and gender inequalities and by the non-existent interventions to adapt to and mitigate their adverse effects (Ngcamu, 2023).

Therefore, comprehensive solutions are key for preventing and mitigating the negative impacts of climate-related disasters. According to the [Sendai Framework for Disaster Risk Reduction \(2015\)](#), the following is required to achieve this goal:

“an all-of-society engagement and partnership. It also requires empowerment and inclusive, accessible and non-discriminatory participation, paying special attention to people disproportionately affected by disasters, especially the poorest. A gender, age, disability and cultural perspective should be integrated in all policies and practices, and women and youth leadership should be promoted” (p. 13).

Facilitating engagement, empowerment and partnerships with the stakeholders affected by disasters is key to ensuring effective and inclusive participation. This involves participants in every stage of an initiative, starting with the identification of goals to shaping decision-making (Bubb and Le Dé, 2022). However, Gaillard and Peek (2019) pointed out that when working in disaster-prone areas, researchers must interact sensitively with locals, avoiding adding to these populations' problems and avoiding the influx of foreign scientists, which can anger and fatigue them and cause them to decline to participate in the research initiatives.

Given the importance of managing climate-related disasters with an inclusive approach in vulnerable areas, this research topic aimed to draw emerging researchers from countries in the Global South who prioritize inclusive methods to engage and empower vulnerable

groups to propose solutions for building a more resilient future. The Research Topic incorporated four original research articles that present research findings from study areas in Brazil, Chile and South Africa, discussing different ways to ensure inclusiveness.

Local actors' engagement in identifying climate-related impacts

Communities exposed to the impacts of climate change are often approached as subjects of study rather than active collaborators. Therefore, that approach is shifting towards more inclusive and people-centered approaches such as the ones considered in the research works of [Mugari et al.](#) and [Pereira et al.](#).

The research paper conducted by [Mugari et al.](#) aimed to identify challenges, gather current perspectives, knowledge and capacity gaps and connect different stakeholders to collaborate in an inclusive flood risk management in the Vhembe district of South Africa. The researchers conducted participatory workshops, which were attended by a diverse group of stakeholders to discuss flood management and adaptation measures in South Africa's Vhembe district. The outcomes of this study show that stakeholders are willing to identify the drivers, challenges, and potential solutions to mitigate flood risk using a more bottom-up approach that enables the democratization of risk management.

The other study led by [Pereira et al.](#) aimed to co-design local-scale observations with traditional and local communities to characterize their local context with regard to the impacts of climate-related disasters. The researchers adopted a citizen science approach, which involved the active participation of local members of two traditional communities in southeastern Brazil. The participants used georeferencing and data collection tools to conduct quantitative surveys and interviews to collect qualitative information. Therefore, they became community researchers who investigated climate-related impacts in their community. As a result, these community researchers were able to quantify the socioeconomic, cultural, climatic, physical and biological impacts linked to climate-related disasters and understand details of how these impacts are affecting local communities and how communities are adapting to climate-related disasters.

Disaster aftermaths

While focusing on preventing and mitigating disasters is key to enhancing resilience, it is also important to look back at past experiences to identify what was effective and what was not effective. In their research, [Sandoval-Díaz et al.](#) sought to characterize the lessons learned, implications and perceived social support of older individuals in disaster risk situations. The study was conducted with focus groups of older adults in Ñuble, Chile. The research team used a mixed-methods approach that incorporated SWOT (Strengths, Opportunities, Weaknesses, and Threats) analysis, life stories, focus groups, photo evocation, and the "Recognizing my community" exercise. The results show that these methods were effective in identifying disaster aftermaths among the participants involved, but also in learning

after experiencing distressful episodes, which can influence risk perceptions and coping capacities.

Climate crisis and indigenous-led filmmaking

Climate-related hazards impact communities in different ways and the ways in which these impacts are observed and addressed depend on the local context and the extent of direct impact. In this regard, the study by [Ramirez-Loaiza](#) focused on exploring the healing practices of Indigenous communities in Upper Xingu, Brazil, to recover from the impacts of climate change. The research was conducted by analyzing Takumã Kuikuro's documentaries and records (short videos) from the decolonial panorama and interviewing the filmmaker and members of the People's Palace Projects. This research highlights the importance of rituals within communities as a technique to heal, along with the importance of collectivism and weaving networks from reciprocities.

Overall, the research papers highlight different ways to promote the inclusiveness and visibility of groups that are often ignored or merely considered as a subject of study in disaster studies. [Mugari et al.](#) and [Pereira et al.](#) involved local actors to actively participate in identifying and co-designing disaster risk management strategies. [Sandoval-Díaz et al.](#) facilitated dialogue and exchange with older individuals to better understand the impacts of previous disasters and identify their aftermaths and learned lessons. Finally, [Ramirez-Loaiza](#) analyzed audiovisual materials of communities produced by an Indigenous filmmaker and conducted interviews that were key to understanding how communities perceive their environment and how they cope with the climate crisis.

Author contributions

MT-R: Writing – original draft, Writing – review & editing.
CF: Writing – original draft, Writing – review & editing.
JV: Writing – original draft, Writing – review & editing.

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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