

AN ALERT FOR ALL: PEOPLE-CENTERED EARLY WARNING SYSTEM FOR PERSONS WITH DISABILITIES



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Introduction

Socio-environmental disasters have intensified due to climate change and the ongoing production of risks and vulnerabilities. These events disproportionately impact persons with disabilities (PwD) not because of their physical condition, but due to limited inclusion in risk management policies, barriers to fundamental rights, and power dynamics embedded in body-territory relations (UNDRR, 2023).

Objectives

This research seeks to co-produce, with persons with disabilities, inclusive methodologies for implementing a people-centered early warning system while assessing vulnerabilities, capacities, and representation in public policies.

Study Area

The municipality of Nova Friburgo is located in the mountainous region of Rio de Janeiro State and comprises eight districts with approximately 189,000 inhabitants. This site was selected due to the fact that 96% of its territory is classified as having high to moderate susceptibility to landslides, flooding, and flash floods (Seplag/RJ, 2025).

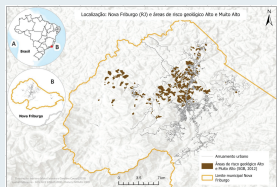


Figure 1: Location of Nova Friburgo within Brazil, municipal boundaries, and areas of high to very high landslide risk.

Methodology

The methodological trajectory is divided into three main phases:

- Bibliographic and Documentary Analysis: A review of disaster policies and EWS frameworks to identify representation gaps regarding PwD;
- In-depth Interviews: Semi-structured, accessible interviews with PwD, caregivers, and civil defense agents, following theoretical saturation criteria;
- Participatory Workshops: Three sequential workshops structured around the four EWS axes.

Bibliography

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Results

- The literature review and documentary analysis reveal a major gap in studies addressing the inclusion of persons with disabilities in early warning systems, with little reference to their participation in disaster risk management.
- Barriers to their fundamental rights highlight the multidimensional nature of vulnerability processes that affect individuals before, during, and after disasters.
- Interviews and workshops will deepen the understanding of lived experiences, risk perceptions, accessibility barriers, and recommendations for implementing a more inclusive warning system that promotes territorialization and equity.

Discussion

To bridge the gap between international frameworks, such as the Sendai Framework, and local reality, this research shifts the epistemological focus toward a "person-centered" Early Warning System (EWS) (Marchezini et al., 2017). By utilizing action-research and transdisciplinary methodologies in Nova Friburgo, the study recognizes PwD as co-researchers and co-creators, spanning from the design of interview protocols to the development and execution of participatory workshops, conducted exclusively with people with disabilities, as well as collaboratively with health services, social assistance, and civil defense agencies.

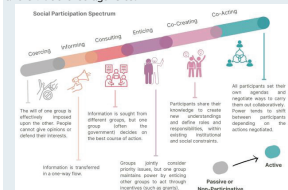


Figure 2: Types of participation and power relationships (Ferreira et al., 2023).

This approach challenges the "deterritorialization" of disabled bodies by fostering horizontal dialogue between technical expertise and lived experience across the four pillars of EWS: risk knowledge, monitoring, communication, and response capacity. Ultimately, the co-production of inclusive methodologies aims to transform PwD from objects of intervention into political subjects of disaster risk management. As emphasized by the motto "Nothing about us, without us," ensuring effective participation is not a sectoral challenge but a fundamental requirement for building resilient and equitable territories.

Conclusion

This project aims to address scientific and practical gaps by positioning persons with disabilities as protagonists in the co-production of warning systems, contributing to more inclusive and effective public policies through recognition, active listening, and shared construction of solutions.

Accessible audio description →



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