

The El Haouz earthquake in Morocco (September 8, 2023, Mw 6.8) and the Noto Peninsula earthquake in Japan (January 1, 2024, Mw 7.6) occurred within a few months of each other, in two very different geographical and socio-political contexts. Despite this distance, both events provide a valuable comparative lens through which to examine disaster response and reconstruction practices in rural, peripheral, and structurally vulnerable regions. This paper presents a comparative analysis of the two earthquakes, focusing on the trajectories of reconstruction, and situating them within the international framework of the Sendai Framework for Disaster Risk Reduction (2015–2030).

The El Haouz earthquake devastated the High Atlas region, killing nearly 3,000 people and destroying or damaging approximately 60,000 buildings. The disaster exposed the acute vulnerability of rural mountain communities, where poverty, isolation, and reliance on traditional earthen housing magnified the impacts. The Moroccan government responded with an ambitious five-year, MAD 120 billion national reconstruction program, explicitly linking recovery to long-term regional development and the reduction of territorial inequalities. Reconstruction was thus framed as a lever for socio-economic transformation.

By contrast, the Noto earthquake caused around 200 deaths but revealed equally significant vulnerabilities: the extreme aging of the local population, reliance on fragile wooden housing, and the disruption of critical technical networks. The earthquake produced unique geophysical impacts, such as coastal uplift of up to four meters, rendering ports unusable and isolating entire communities. Japan's response was characterized by the rapid mobilization of university hospitals (notably Kanazawa), the deployment of Disaster Medical Assistance Teams (DMAT), and innovative use of satellite data, artificial intelligence, and digital platforms to assess damage and coordinate relief. Reconstruction followed a sequenced approach: emergency, preparatory, early recovery, and mid-recovery phases, culminating in the integration of public–private coordination centers and delivery of 6,671 temporary housing units within the first year.

Despite the differences in scale, resources, and institutional traditions, both cases highlight shared challenges. Geographic isolation hampered logistics in Morocco and Japan alike. Vulnerable social structures—poverty in the Atlas, demographic aging in Noto—intensified humanitarian consequences. In both cases, reconstruction was conceived not simply as a return to normality but as an opportunity to “Build Back Better.” Morocco emphasized territorial equity and strengthened building codes, while Japan prioritized digital transformation and governance innovations.

Ultimately, the juxtaposition of El Haouz and Noto underscores a paradox: although disasters occur in distinct contexts, the vulnerabilities they expose and the lessons they yield converge. Both earthquakes remind us that disaster recovery is as much about rethinking social contracts and governance systems as it is about repairing physical damage. This comparative study contributes to broader discussions on how disasters can serve as catalysts for resilience-building in diverse cultural and institutional environments.