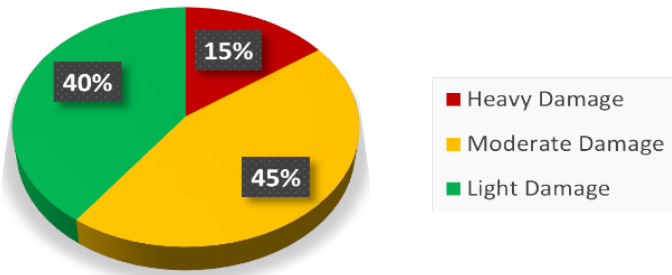


Situation Report

Morocco M6.8 Earthquake 2023



Our team of earthquake engineering experts in Marrakesh gathered the following critical information:

- Most of the damage is concentrated in rural mountain areas located between the cities of **Marrakech and Taroudant**. Damage appears more pronounced in areas with **soft soil**, particularly in the bottom of valleys.
- Most rural buildings use **traditional construction methods** including:
 - **Unreinforced stone masonry structures** with mud mortar (round and flat stones).
 - **Earth constructions**, both rammed earth and adobe.
 - **Confined masonry buildings**, not very common in rural areas.
- The performance of traditional structures varied, with **some collapsing while others displayed resilience**, depending on construction techniques.



Round Stone

Higher collapse rate due to absence of stone interlocking.



Earth Constructions (Rammed and Adobe)

Roof collapse and mortar joint cracking, both repairable damages.



Flat Stone

Lower collapse rate with repairable damage.



Confined Masonry

Concrete and clay hollow blocks showed adequate seismic performance.

This report is based on emerging data from Miyamoto experts in the disaster zone, decades of experience in similar disasters, and trusted sources.