

Earthquake Impacts and Responses in Pakistan

Understanding Earthquakes in Pakistan

Pakistan is one of the most earthquake-prone countries in South Asia because it lies where the Indian and Eurasian tectonic plates meet. The collision of these plates creates stress under the ground, which is released in the form of earthquakes. Northern areas such as Kashmir, Gilgit-Baltistan, and parts of Khyber Pakhtunkhwa are especially at risk. The 1935 Quetta and 2005 Kashmir earthquakes were two of the deadliest disasters in Pakistan's history. They destroyed homes, schools, and hospitals and killed thousands of people. The rugged mountains and poor construction quality make the damage even worse. Many buildings are not built to survive strong shaking, which leads to large-scale destruction. Earthquakes in these areas also cause landslides and cut off access to remote villages. Understanding why Pakistan faces such earthquakes helps in creating better safety and preparedness plans for the future. Awareness and education can save lives when the next big earthquake strikes.

Primary Impacts of Earthquakes

Primary impacts are the direct results that happen immediately after an earthquake. The most serious of these is the collapse of buildings, roads, and bridges. When the ground shakes violently, weak structures cannot stand, and people are often trapped under rubble. Power and communication lines also break, causing blackouts and loss of contact. Water pipes burst, spreading contamination and diseases such as cholera. In mountainous regions, roads get blocked by falling rocks and landslides, stopping rescue teams from reaching victims quickly. Hospitals are damaged, reducing medical care when it is most needed. Schools and markets are also destroyed, creating chaos in communities. Fires sometimes start when gas lines burst or electrical wires spark. All these immediate effects make it difficult to save lives during the first few hours. Hence, strong emergency response systems and safer construction are essential to limit these direct losses during future earthquakes.

Secondary Impacts of Earthquakes

Secondary impacts appear after the earthquake and can last for months or years. One common secondary effect is landslides in hilly regions, which can bury entire villages or block rivers. When rivers are blocked, artificial lakes form and may later burst, causing floods downstream. Earthquakes also destroy farmlands, food markets, and roads, leading to shortages of food and clean water. Thousands of people become homeless and are forced to live in temporary camps. These camps often face poor sanitation and health problems, especially for children and the elderly. Education is interrupted because schools are damaged or used as shelters. Survivors also experience mental stress and fear, making recovery harder. Economically, the government spends large sums on rebuilding, which affects national development. Therefore, the secondary impacts of earthquakes are long-lasting and can slow down the progress of entire communities if recovery is not well-planned.

National Responses to Earthquakes

After an earthquake, Pakistan's National Disaster Management Authority (NDMA) and the Pakistan Army take the lead in rescue operations. Their teams clear debris, rescue trapped people, and provide first aid. Local governments set up emergency shelters and distribute food, tents, and blankets to affected families. Engineers inspect buildings to see which ones can be repaired or need to be rebuilt. The NDMA also prepares disaster management plans and conducts community training programs to teach people how to react during earthquakes. Public awareness campaigns on television and radio share important safety tips. Some provinces organise earthquake drills in schools and offices to improve readiness. In recent years, Pakistan has introduced new building codes for earthquake-prone regions. These laws encourage the use of stronger materials and safer designs. National coordination has improved, but there is still a need for more funding and training at the local level.

International Responses and Aid

After major earthquakes, the international community plays a crucial role in helping Pakistan recover. The United Nations, Red Cross, and World Health Organization send emergency relief supplies such as food, tents, and medicines. Countries like the United States, China, and Turkey provide financial assistance and rescue experts. International NGOs, including UNICEF, Save the Children, and Oxfam, help rebuild schools, hospitals, and clean water systems. Global institutions such as the World Bank and Asian Development Bank support long-term reconstruction and strengthen Pakistan's disaster management system. Medical teams from other countries also set up temporary hospitals to treat the injured. Engineers share technology and expertise for designing earthquake-resistant buildings. This global cooperation not only helps Pakistan recover but also improves its ability to deal with future disasters. International support shows that disaster management is a shared responsibility beyond national borders.

Lessons Learned and Future Preparedness

Every earthquake teaches important lessons about the need for better planning and preparedness. Pakistan has learned that strict building codes can prevent massive destruction and save lives. Early warning systems are vital to alert people even a few seconds before shaking starts. Schools must include disaster education to teach children how to respond calmly and safely. Local communities should be trained in evacuation drills and first aid. Reforestation and land protection can reduce landslides after earthquakes. Coordination between government agencies, the army, NGOs, and international partners should be strengthened. Modern technology such as satellite mapping and digital alerts can improve disaster response. People should also be aware of how to prepare emergency kits at home. Building a culture of safety at all levels—from families to cities—will help reduce the loss of life and property in the future. Preparedness is the key to resilience.