

Institutional Framework for Seismic Risk Management in India

The National Disaster Management Plan, 2016(National Disaster Management Authority, Government of India, 2016)lays down important steps and recommendations for seismic risk assessment and disaster preparedness.

The Plan has entrusted India Meteorological Department (IMD) to monitor earthquakes and form a real time seismic monitoring network and disseminate information to agencies involved in earthquake tracking, research, mitigation and response. Geological Survey of India in coordination with IMD is responsible for hazard zonation and micro seismic zonation of vulnerable areas . The National Disaster Management Authority, National Institute of Disaster Management and other Science and Technology departments and institutions have been entrusted with the task of Earthquake hazard risk and vulnerability assessment. The BMTPC (Building Materials & Technology Promotion Council) in coordination with the Bureau of Indian Standards (BIS) and other institutions formulate and update the National Building Code and other standards. The state departments are required to act accordingly and ensure measures to understand and mitigate seismic risk.

The Ministry of Home Affairs, Govt of India is identified as the nodal agency for coordinating Earthquake Response and central assistance, while the State Disaster Management Authorities, Revenue Department and Commissioner for Relief along with the Panchayats and Urban Level Bodies are responsible for the organization of immediate response and to seek further assistance if necessary from central agencies.

Special Housing Schemes, retro fitment of prioritized lifeline structures and buildings and hazard resistant construction, model codes for town planning, civil and public works, and conduction of safety audits have been given due importance and the Ministry of Rural Development, Ministry of Urban Development along with other relevant ministries are responsible to devise strategies and plans in this regard. The implementation and compliance activities are the responsibilities of state departments.

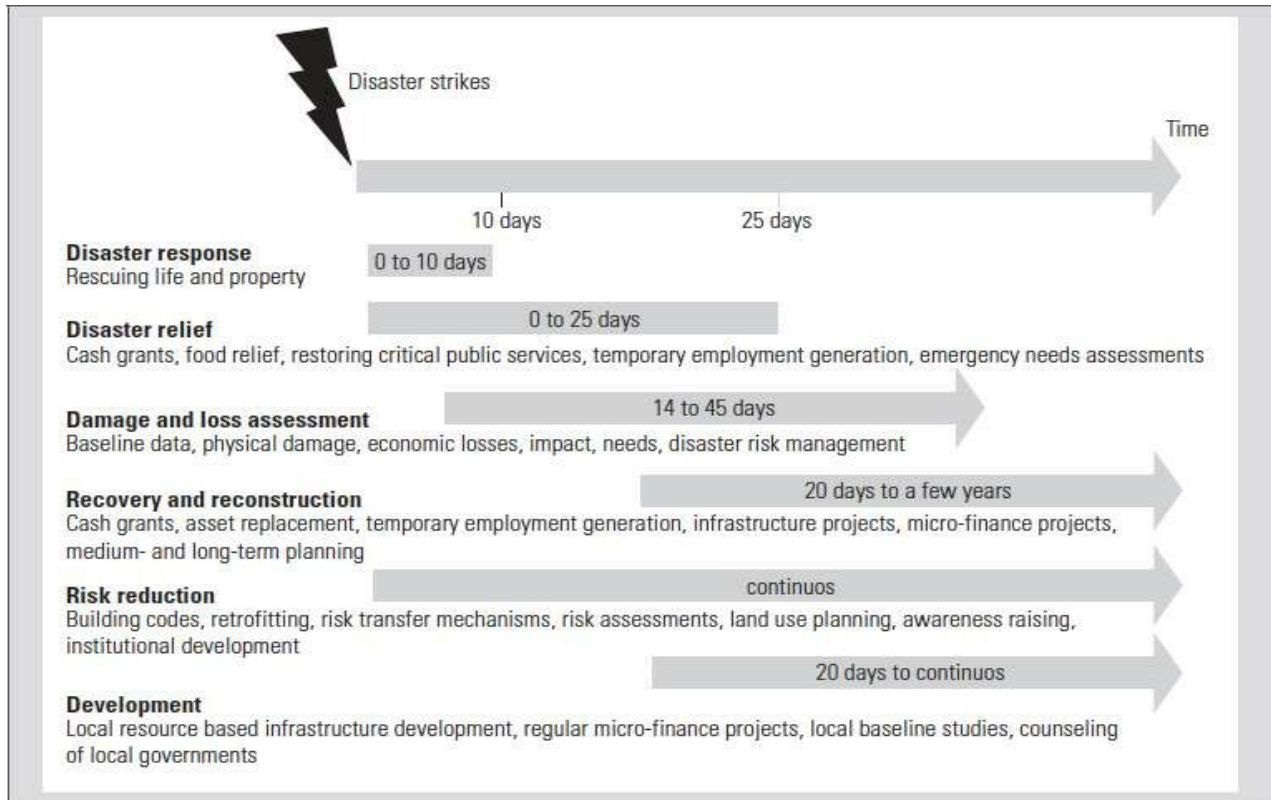
Capacity Development for Earthquake related training, curriculum development have been tagged to NIDM,NDMA, Ministry of Earth Sciences, Ministry of Human Resources and Development, University Grants Commission and other institutions. Awareness Generation plays a key role in the earthquake preparedness and NDMP has identified NDMA, NIDM, Central Armed Police Forces and National Disaster Response Force (NDRF) as the central agencies in charge of carrying out mass media campaigns, promoting the culture of earthquake risk prevention, mitigation and management, promoting attitude and behavioral changes in the awareness campaigns, the promotion of risk transfers and insurance, community radio and the strengthening of civil society organizations. All State departments including State disaster Response Forces and Fire and emergency Services, Civil Defense, Police, DDMA and Panchayats/ ULBs are to assist and enhance the awareness campaigns and promotion of culture of earthquake risk consciousness in the public. Mock Drills are also to be conducted by the Central and State Agencies regularly.

Earthquake Preparedness& Response

The first priority in Earthquake response is to minimize loss of lives, by undertaking effective search and rescue operations and the evacuation of affected people. Evacuation is categorized as Preventive (post early warning before materialization of hazard), Protective (as a precaution), Rescue- oriented falls under Search and rescue and Reconstructive- resettlement in safe locations. Search and Rescue (SAR) is a technical activity undertaken by trained personnel who rescue and attend to casualties under adverse conditions(National Disaster Management Authority and Indira Gandhi National Open University, 2011). Specific response during Earthquake hazards include:

- Rescuing victims from rubble
- Special care in case of fire
- Evacuation of at risk people in safe locations
- Rendering first aid
- Positioning of ambulances

Figure 12 Post Earthquake Risk Management Source: (GFDRR, 2011)



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