

# Myanmar

## Earthquake Risk Assessment

Myanmar is located on one of the two main earthquake belts of the world, known as the Alpide belt. It stretches from the northern part of the Mediterranean and extends eastwards through Turkey, Iran, Afghanistan, and the Himalayas. Further it turns to the south and runs into Myanmar territory and finally ends in Indonesia. The country has witnessed several significant earthquakes in the past. During the 20th Century alone, at least 18 large earthquakes occurred along the central lowland region of Myanmar where the well-known Sagaing Fault passes through. Because of the land's plentiful agricultural resources, the most populated cities of Myanmar are located in this central region. The rapid urbanization of some cities in Myanmar in the past few decades has led to a greater exposure to risks, which could result in monumental losses during a major earthquake disaster.

Realizing the earthquake proneness of many areas in Myanmar, the Asian Disaster Preparedness Center (ADPC), with financial support from the Norwegian Ministry of Foreign Affairs (MFA), is pleased to take up the challenge and lead the implementation of a comprehensive earthquake risk assessment for the country.

### Objectives

In view of current emergent needs for seismic risk reduction, ADPC in close collaboration with the Norwegian Geotechnical Institute (NGI) would like to support Myanmar in developing the comprehensive seismic risk assessment approach in partnership with the Government of Myanmar and national technical and research agencies. The objectives of the project are as follows;

- To review past and ongoing activities on seismic risk assessment
- To identify sources of seismic activities and assess seismic hazards in Myanmar
- To study and identify the most vulnerable areas in Myanmar
- To carry out a seismic risk assessment to understand the vulnerability of buildings and urban infrastructure
- To build the capacity of national agencies in seismic risk assessment through international collaboration
- To develop a strategy for seismic risk reduction inline with national and international DRR frameworks

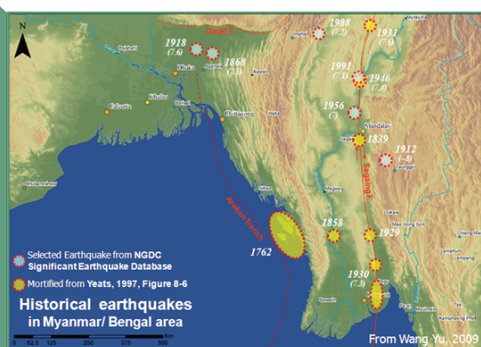
### Methodology

The methodology has been proposed based on the evaluation of various activities carried out in past and ongoing projects. The methodology will be based on widely accepted deterministic and probabilistic seismic risk assessment approaches. Systematically, the methodology for seismic risk assessment is compartmented into six key work packages including;

- 1) Identification of Seismogenic Sources
- 2) Seismic Hazard Analysis
- 3) Site Selection for a Pilot Study
- 4) Local Site Effects
- 5) Vulnerability Analysis
- 6) Seismic Risk Assessment

### Benefits

- The project will bring national and international experts who will help local scientists in building a state-of-the-art methodology for seismic risk assessment specifically for Myanmar.
- Since the project will be executed in close partnership with Myanmar Department of Meteorology & Hydrology, the project will help in building the capacity of national experts in seismic risk assessment.
- The project will provide rationale for formulating national action plans for earthquake risk mitigation.



- The project will evaluate and validate past work carried out by various technical agencies and identify gaps.
- The project implementation will assist the Myanmar government to incorporate seismic risk reduction in its development planning; ultimately enforcing seismic safety in urban areas.

## Timeframe

Two and a half years time span from July 2009 to December 2011.

## Contact

Should you have any questions on the project, please contact:

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## Participating organizations

Department of Geological Survey and Exploration (DGSE), Department of Meteorology and Hydrology (DMH), Department of Human Settlement and Housing Development (DHSHD), General Administrative Department - Ministry of Home Affairs (GAD)

## Financial Assistance

Ministry of Foreign Affairs (MoFA)  
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