

Basic information

Name of the Project

Project for Evaluation & Mitigation of Seismic Risk for Composite Masonry Buildings in Bhutan

Project Duration

April 2017 - March 2022

Overall Goal

Seismic technology for disaster mitigation of the composite masonry buildings is disseminated across the country.

Project Purpose

The capacity of responsible governmental organizations (DDM, DOC, DGM and DES) for seismic disaster mitigation of the composite masonry buildings in Bhutan is enhanced.

Outputs

1. Seismic risks of composite masonry buildings are evaluated.
2. Seismic technology for constructing and strengthening composite masonry buildings is developed.
3. The dissemination mechanism for the seismic technology is enhanced.

Funding Agency

Royal Government of Bhutan
Japan International Cooperation Agency (JICA)

Implementing Agency in Bhutan

1. Department of Disaster Management (DDM), Ministry of Home and Cultural Affairs (MoHCA).
2. Department of Culture (DOC), MoHCA.
3. Department of Geology and Mines (DGM), Ministry of Economic Affairs (MoEA).
4. Department of Engineering Services (DES), Ministry of Works and Human Settlement (MoWHS.).

Collaborating Agency in Japan

1. Nagoya City University
2. National Institute for Earth Science and Disaster Resilience (NIED)
3. Kyoto University
4. Nihon University
5. Kagawa University
6. Tohoku University

Beneficiaries

DDM, DOC, DGM, DES, local government of pilot sites, communities in pilot sites, and Bhutanese.

SATREPS

Science and Technology Research Partnership
for Sustainable Development Program

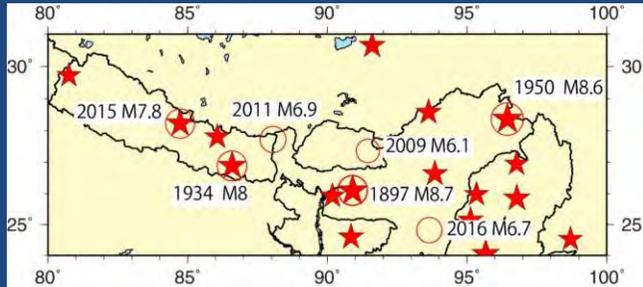


PROJECT FOR EVALUATION AND MITIGATION OF SEISMIC RISK FOR COMPOSITE MASONRY BUILDINGS IN BHUTAN



Project Background

Threats of Earthquakes



★ Earthquakes more than M7 happened near Bhutan

○ Earthquakes damaged Bhutan



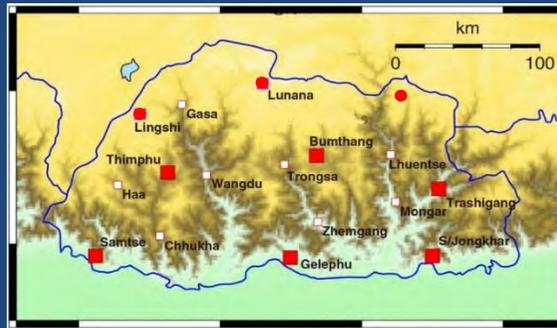
Many are Living in Traditional Houses



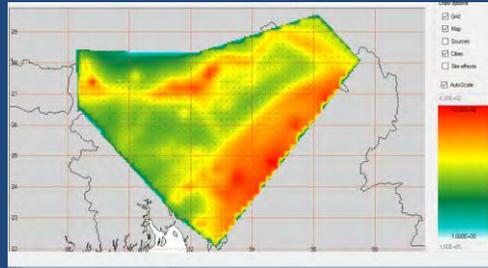
Need to Improve the Seismic Resilience of Traditional Houses in Bhutan

Project Activities

1 To Evaluate Earthquake Risks



Enhancing Earthquake Monitoring Network in Bhutan



Developing a Hazard Map

2 To Develop Seismic Technology



Static/Dynamic Testing of Traditional Houses



*Designing Strengthening Kits for Vulnerable Houses
Making a Guideline/Standard for Composite Masonry Houses*

3 To Disseminate Seismic Technology



Developing Visual Materials for Public Awareness



Training for National/Local Government Staff

