

Developing Disaster Resilience Action Plan through GIS & Prioritising Actions for Natural Disaster Risk Reduction Shillong & Gangtok

Project Proponent:



Supported by:



Consortium Partners:



BACKGROUND

Himalayan cities are particularly vulnerable to disasters and extreme events like earthquakes, landslides, flash floods, thunderstorms and cold waves. The magnitude of hazards and extreme events in the region may vary depending on the risk exposure of the city.

Physical risks and vulnerabilities in the Himalayan cities are often accompanied by difficult terrain, lack of necessary resources – financial, human and institutional – as well as lack of access to relevant scientific information on the coping mechanism. This necessitates a thrust on improving the knowledge base and adaptive capacity of the cities by integrating disaster risk reduction measures in the urban planning.

In addition, rapid urbanization and climate change could exacerbate environmental stress in the region. Thus, there is a need to collect and review evidence to assess the vulnerability and likely impact of disasters in the region. IRADe with support from Ministry of Environment, Forests & Climate Change (MoEFCC) under National Mission on Himalayan Studies (NMHS) aims to develop Disaster Resilience Action Plans for Shillong and Gangtok cities.

AIM

To provide decision-supporting tools for disaster risk reduction in the urban areas of the North East Region. It includes development of cadastral maps for micro zonation of hazard and action plan for disaster resilience for Shillong & Gangtok.

OBJECTIVES

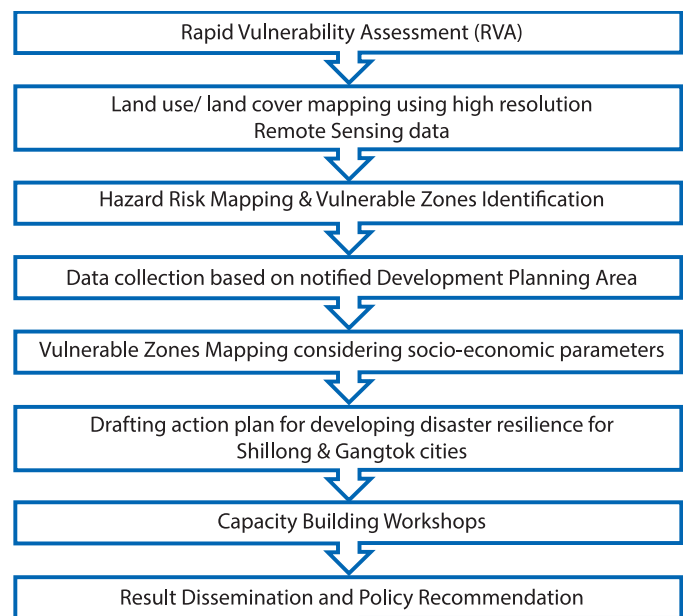
- Develop cadastral maps at the scale of 1:4000 and map hazard/ risk wise vulnerable zones of Shillong and Gangtok urban agglomerations.
- Conduct ground survey to Identify and map critical infrastructure – telecommunication installations, emergency operation centers, shelter homes, slums, hospitals & schools,
- Develop disaster resilience action plan for the identified cities and prioritize actions for disaster risk reduction through multi-stakeholder consultations involving citizens, government, public and private sector.
- Spread awareness and raise capacity of the citizens as well as city, district and state authorities.

PARTNERS

The research is led by Integrated Research and Action for Development (IRADe), a leading research institute and think tank with consortium members including North-Eastern Space Applications Centre (NESAC), Meghalaya and Institute G.B. Pant National Institute of Himalayan Environment & Sustainable Development, (GBPNIHESD), Almora.

For more details please check the web-link: irade.org/cce-drap.htm

PROJECT APPROACH



EXPECTED OUTPUTS

- Land use/land cover maps for Shillong & Gangtok cities at cadastral scale 1:4000.
- Hazard wise vulnerable zone maps of the cities.
- Vulnerability assessment of Shillong & Gangtok cities to natural disasters.
- Critical infrastructure risk mapping for the cities.
- Disaster resilience plans for the Shillong & Gangtok.
- Capacity building of city, district and state authorities on disaster resilience.

OUTCOMES

The outcomes of the project will help in developing policies for reducing the risk of losses in the events of natural disasters in the two cities.

- Generate awareness amongst stakeholders such as policy makers, state government, local governing bodies, government departments, NGOs, communities/citizens about the disaster risk reduction to reduce losses.
- Address lack of coordination and bring all stakeholders to one platform, leveraging IRADe's experience, expertise and strong local network.
- Craft and prioritize city-specific actions for disaster risk reduction.
- The project will lead to capacity building of the local mountain communities in disaster risk reduction by imparting them the necessary knowledge and information through social networking and public participation in workshops.

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