

Concept note

A 2-days district level training programme on **Earthquake Risk Reduction and Management** is scheduled on **20th – 21st June 2022** at Morbi.

Subject	Earthquake Risk Reduction and Management		
Target Participants	Dy. Executive Engineer, Assistant Engineer, Additional Assistant Engineer, Technical Resource Person,		
Date of Training Programme	20 th June – 21 st June 2022	Location	Morbi
Time	10.30hrs – 18.00hrs	Coordinator	Piyush Ramteke, Programme Manager, GIDM
Expected no. of Participants	30	Contact	+91-9662007130 rspm1-gidm@gujarat.gov.in

1. Aim

To develop the capacities of target participants by linking their roles in DRM activities with field level actions using appropriate technologies considering global perspectives and action at local level

2. Background

Gujarat is located in the Himalayan Collision Zone where Indo-Australian tectonic plate slides under Eurasian Plate causing active fault lines beneath. The Vulnerability Atlas of India (BMTPC, 1997) classifies Gujarat into four classes based on a base of 10.3 million buildings recorded in the 1991 Census and BIS standard (IS: 1893 1984). As per the classification 19% of the total area in Gujarat is at a very high risk for earthquake, i.e. seismic zone V, 13% area of the state is at a high risk for earthquake, i.e. seismic zone IV, another 66% area of the state is at a moderate risk for earthquake, i.e. seismic zone III and only 1% area of the state is at a low risk for earthquake, i.e. seismic zone II.

As per the Vulnerability Atlas, the area in Gujarat that falls into seismic (MSK Intensity Scale) zones is as below:

- Very High Risk: >MSK IX (19 percent)
- High: MSK VIII (13 percent)
- Moderate MSK VII (66 percent)
- Low Damage: less than or equal to MSK VI (1 percent)

All of Kutch is classified under the Very High Damage Risk Zone while parts of northern coastal Saurashtra and north Gujarat fall into the High Damage Risk zone. Kutch is framed by a series of semi-parallel neo-tectonic faults that extends north to south from the famous Allahbund Fault, through the Island Belt Fault, the Kutch Mainland Fault, the Katrol-Bhuj Fault, the Wagad Fault and the North Kathiawar Fault.

As per ISR, there are 19 probable earthquake source zones identified in Gujarat. Out these 19 faults, 12 are in Kachchh region, 5 are in Saurashtra and 2 are in Mainland Gujarat region. The maximum magnitude for the source zones in Kachchh region varies from 7.2 to 8.0. The maximum magnitude for the source zones in Saurashtra and Mainland Gujarat is 6.0.

As Morbi district of Saurashtra region falls in Seismic Zone –IV, it is proposed to undertake a 2-day field level training programme on **Earthquake Risk Reduction and Management** in Morbi.

3. Objectives

- i. To develop a sound understanding about Earthquake and its impact on buildings
- ii. To enhance the knowledge of engineers in Earthquake Resistant Construction of buildings
- iii. To encourage the use of relevant building codes and guidelines towards Earthquake resistant construction
- iv. To promote Earthquake resistant building construction practices in hazard prone areas
- v. To encourage strengthening of existing buildings to earthquake resistant buildings through retrofitting

4. Why Training on Earthquake Risk Reduction and Management ?

- i. Morbi falls in seismic Zone-IV which comes under High Risk Zone.
- ii. Lack of awareness among various stakeholders about the seismic risk
- iii. Inadequate provision for risk informed Land use planning
- iv. Inadequate monitoring and enforcement of earthquake-resistant building codes and town planning bye-laws
- v. Absence of earthquake resistant features in non-engineered construction in suburban and rural areas
- vi. Lack of formal training among professional in earthquake-resistant construction practices
- vii. Lack of adequate preparedness and response capacity among various stakeholders groups

5. Target Departments

- i. R&B Department
- ii. Panchayat Department
- iii. Samagra Shiksha
- iv. PIU-Health
- v. Gujarat Police Housing Corporation Ltd.
- vi. ULBs
- vii. Water Supply Department

Target Participants

S.No.	Target Group	Level of Participants
1	Dy. Executive Engineer	L-2
2	Assistant Engineers/Additional Assistant Engineers	L-3