

Seismic (Structural & Non-Structural) Hazard Reduction & Mitigation
Shelter & Settlement Working Group
Geneva, Switzerland





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The purpose of this presentation is to bring a cohesive understanding and awareness among practitioners to:

- Assess the seismic activity of any geography, where we plan to respond to disasters,
- Be mindful of the communities' vulnerabilities
- Design our response that brings a balance between process and product



Storing the winter clothes in the Summer and Summer clothes in the Winter



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Today, we will look into the following areas:

1. Visit background information on sources of vulnerability
 - Legend
 - Anecdotes and the impact of their credibility
 - Abandoned structural practices
 - Practical home decorations

1. How can we respond? Pre and post-earthquake response experience
 - Non-structural mitigation and awareness
 - Structural awareness, mitigation and training

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Legends & Anecdotes:

- Earth is held on the horns of a bull and bull's anger causes earthquakes
- Four elephants, who stand on the back of a turtle, hold the earth and balancing over the turtle causes earthquakes

Impact of Urbanization and Increased Education:

- Pro: Undermined the validity of the legends
- Con: Undermined the impact of the legends on preparedness
 - i.e. calm the spirit of the bull by walking 7-steps away from the home
 - The faster one takes the 7-steps the quicker the bull calms down
 - If one saves a child, an elderly or a person with disability with him/her the bull's temper softens

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Mix of old and new/compromised practices. The old structure stands but the new ones collapsed



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Preparation and Awareness:

- Before the earthquake
 - Non-Structural
 - Structural
- During the earthquake
 - Non-Structural
- After the Earthquake



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Drying loads of onions on the roof. Tomato, pumpkin, watermelon, and others are also common.



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Hands-on training to Construction Practitioners.



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Completion of the Demonstration Units on the Shaketable

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After the first simulated earthquake; the traditional structure cracks.

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The traditional structure collapses while the improved unit allows time for escape.