National Society for Earthquake Technology-Nepal (NSET)

Experience from Nepal

NSET

www.nset.org.np

East Nepal Earthquake: Damage, Reconstruction Needs & Efforts

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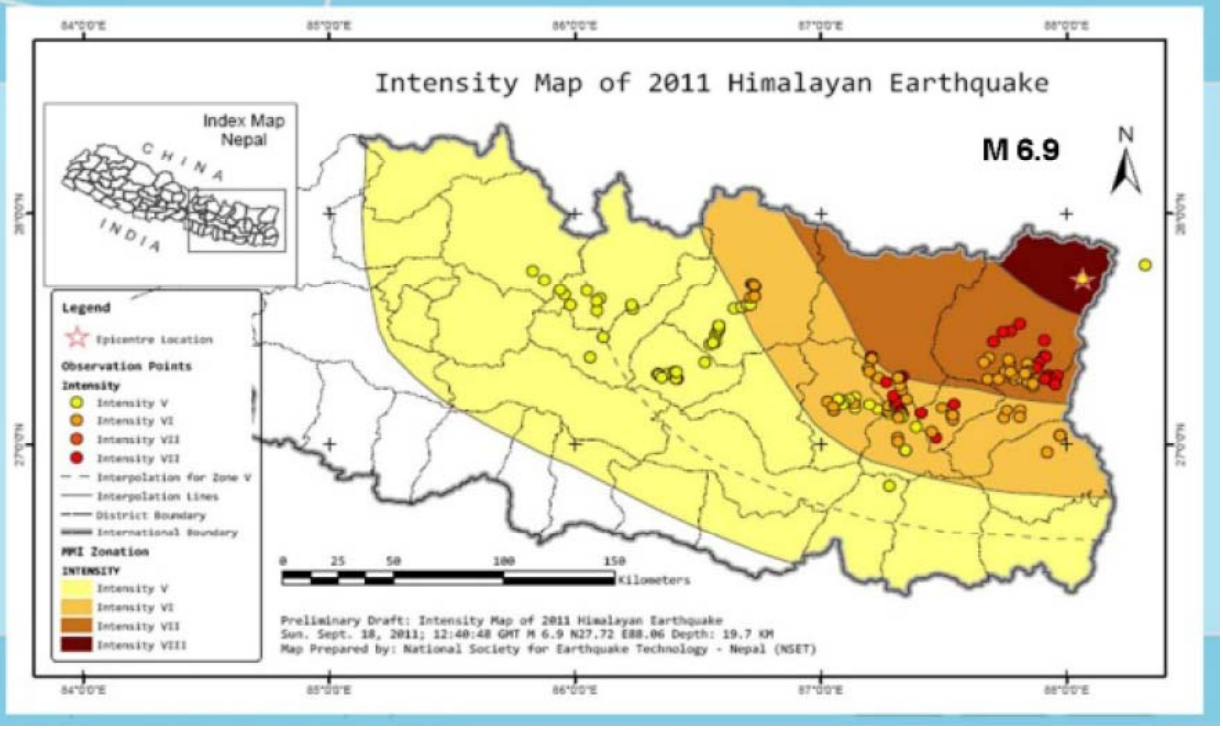
February 22, 2012

East Nepal Earthquake, Sept 18, 2011



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Building Typology / Typical Damage Pattern

GABLE WALL

Stone in Mud Mortar House

Stone masonry wall – Wyeth Separation

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Stone in Mud Mortar Building

Corner separation and in-plane diagonal cracking in stone masonry walls

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Adobe Building

Corner separation, in-plane diagonal cracking, and tilting of walls

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Damage to School Buildings

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Damage to School Buildings

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Damage to Suspension Bridge by EQ Induced Landslide

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Extent of Damage

- Definition of damage vis-a-viz acceptable level of risk
  - eg. PDNA by world bank and assessment of local authorities
  - Planning baseline

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Extent of Damage

Private Houses

>DG 3 = 7,000 -10,000 * 300,000 (excluding salvaged materials) = 3,000,000,000

DG 2-DG 3 = 15,000 – 20,000 *100,000 = 2,000,000,000

Schools/Colleges

>DG3 = 700 – 1,000 (bldgs) * 1,000,000 = 1,000,000,000

DG 2-DG3 = 1,500 – 2,000 *500,000 = 1,000,000,000

Health Facilities

>DG3= 150 – 200 * 500,000 = 100,000,000

DG2 – DG3 = 150 -200 *200,000 = 40,000,000

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Extent of Damage

Govt offices (Police offices, VDC offices)

>DG3 = 100*1000000 = 100,000,000

DG2-DG3 = 100*500000 = 50,000,000

Others =100,000,000

Water Supply Pipelines/Canals

Bridges(Suspension 5-10 numbers >DG3)

Huge Need!

Total = 7,400,000,000
= 7.5 Arab
= $ 100M

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Response/rehabilation

Earthquake Safe Communities in Nepal by 2020
Home Previous Next

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Missed BBB and BB Smarter

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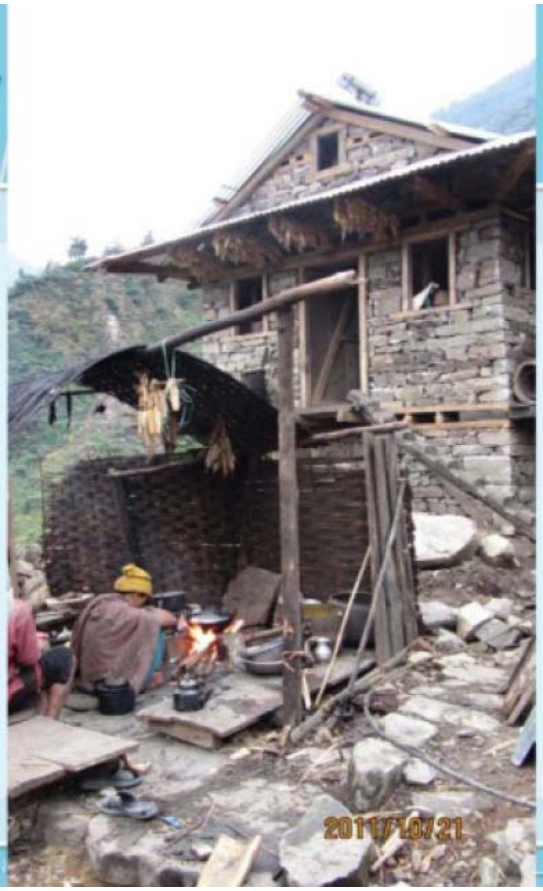

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Missed BBB and BB Smarter

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Reconstruction Efforts

- Government
  - Loans
  - Technology
  - Control mechanism
- NSET
  - Capacity building and awareness for reconstruction
  - Building Code Implementation
  - Long term change of mind set and community based DRR

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8 Masons Training are planned from NSET , 4 Completed 4 on the way

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Masons Training

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Students Orientation

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Masons Training

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Thank You!