

Thailand Experience from M_w 6.2 Mae Lao Earthquake

Dr. Chatpan Chintanapakdee

Department of Civil Engineering, Chulalongkorn University

Earthquake Event Information

- ❖ May 5, 2014 at 11:08:43 UTC (6:08pm local)
- ❖ M_L 6.3 (Thai Meteorological Dept.)
- ❖ M_w 6.2 (Global CMT)
- ❖ Lat 19.71°N, Lon 99.70°E
- ❖ 27 km from Chiang Rai City
- ❖ 9 km from Mao Lao District
- ❖ 19 km from Phan District



Extent of Building Damage

- ❖ Damage focused in Mae Lao and Phan Districts
- ❖ 10,369 houses were inspected
 - 475 red tags (Unsafe for occupancy)
 - 2,180 yellow tags (Limited use, need major repair)
 - 7,714 green tags (Safe, may suffer minor damage)
- ❖ 523 public and religious buildings were inspected
 - 126 red tags
 - 202 yellow tags
 - 195 green tags



Problem

People did not know if their houses were safe or not. They slept in tents for many weeks. Although damage was minor, most people reported their houses as damage hoping for monetary compensation from the government. This may lead to inaccurate allocation of help

Remedy

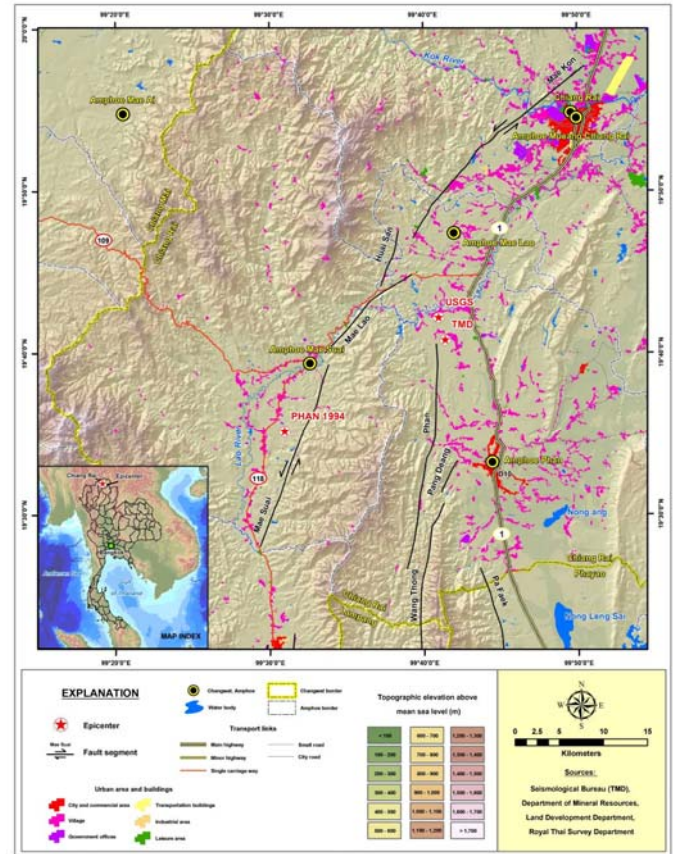
- Volunteer engineers helped surveyed damaged buildings and initially over-rated the level of damage as red tag.
- Many red tagged houses were later rated green after more experienced authority inspected the buildings again.

Problem

People did not know how to properly repair their houses.

Remedy

- Department of Public Work published a booklet informing people how to repair their houses. However, it was still lack of details.
- Information was provided by Engineering Institute of Thailand on their website (www.eit.org)



Problem

Many school buildings were lost. Children did not have classroom.

Remedy

- HRH Princess Sirindhorn granted fund to rebuild several schools.
- Chulalongkorn University (CU) helped a school in Phan District to investigate damaged building and provide engineering drawing showing how to repair building.
- CU had also make a simple knock-down steel structure for temporary class rooms.

