



Nepal After the earthquake

The earthquake which hit Nepal in April destroyed century old buildings in Kathmandu Valley, and more than 500,000 houses collapsed across 14 districts. It was the biggest earthquake in Nepal since 1934. Following the catastrophic event, Mahavir, Nad and Net - representing the **Community Architect Network** and **Hunnarshala Foundation** - went to Nepal to identify possible areas of intervention with the local organization **Lumanti**. **Misereor** funded the assessment trip and emergency relief efforts, and have shown interest in supporting a long term people-led process for recovery.

For the last 10 years, Lumanti has been facilitating a network of women savings credit cooperatives across 11 cities, while developing the villages as living heritage villages. Lumanti had already started mapping the settlements under the ACCA program.

Lumanti team are working to set up a community-

relief and disaster mitigation program in 10 old towns in the Kathmandu valley through community-led finance mechanisms. The women's cooperatives play an important role in managing the villages' own funds, donations, relief materials as well as temporary shelters to ensure that the most needed support comes at the right times, and the members most in need benefit first.

From the survey conducted, Lumanti and communities calculated the demand for temporary shelters to be around 800 units across the 10 old towns. Lumanti and **PTAG** (Pro-poor Technical Assistance Group) developed a temporary shelter design which people can build by themselves to fit with their particular lifestyle, reusing their old materials. Lumanti has already channeled funding and facilitated the construction of 300 temporary shelters.

We visited the women's cooperatives in three old towns in Kathmandu valley (Mechchagaon, Thecho, and Siddhipur), and one rural area Dhading in Jeevanpur village, to assess the current situation, and identify possible types of intervention.

In **Tauchel** and **Mechchagaon**, 70% of houses collapsed. We visited old houses and analyzed the structures to try to find low-cost housing solutions using local materials and local artisans to enrich the heritage settlement. We found that old Nevari architecture, known for its interconnected courtyards, can be rebuilt and retrofitted to improve



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ventilation and bring more nature light to house.

We used existing community maps to organize where construction was needed in the village to preserve their cultural heritage, and started to re-plan the settlements around the existing courtyards and houses. Lumanti will continue the community planning process in these two towns.

In **Siddhipur** and **Thecho** villages, 60% of their housing stock collapsed. They are very old heritage settlements of carpet weavers, with a few heritage buildings which survived the earthquake of 1934. We found many old houses could be retrofitted, however most of the owners had lost confidence in the old way and wanted to build a concrete replacement. We organized meetings and workshops with local artisans to build awareness on the importance of heritage conservation, encouraging people to retrofit the old houses, and save money. Using mapping prepared prior to the earthquake, a mapping workshop is scheduled to start planning rebuilding possibilities, and rehabilitation options.

In **Chhatra Devrali** 80-85% houses have collapsed or are seriously damaged. Most houses are built with local stone and mud mortar, and their livelihoods are linked to agriculture practices. The local people have already started sorting through the debris for material which can be reused again in the rehabilitation phase. Misereor identified Chhatra Devrali as a potential 'model' village for people-led rehabilitation, due to their strong sense of community cohesiveness, the existing potential to use local materials, and desire of people to be trained to build their houses themselves.

Lumanti team will facilitate the production of more temporary shelters, as well as community recovery mapping in 8 old towns, exploring finance models and

various mechanisms for community recovery. Community mapping is an important tool to organize the community rehabilitation process, because it helps the people make strategic decisions in planning their built environment, as well as encouraging them to think as a whole, rather than individually.

Housing

Most damaged buildings were built of low-strength, locally produced masonry (stone, brick, sun-dried brick) bonded with mud mortar, with significantly high seismic vulnerability. According to Misereor's survey there is a general lack of awareness of seismic risk, coupled with lack of dissemination of improved construction practices - particularly in rural areas. We found an opportunity to mobilize and build awareness around the various benefits of retrofitting individual houses to be more earthquake proof, as well as an opportunity to develop self-build housing methods which reuse and recycle debris, helping the villagers build their own permanent shelters more cheaply and efficiently.

Our long term objectives is to rehabilitate 2000-2500 houses, within 2-3 years. Lumanti, Hunnarshala and CAN will assemble a socio-technical working group to provide technical and architectural support to the whole program, as well as developing a participative program between the housing cluster and village scale, alongside village committees and leaders and trained masons and carpenters.

| Chawanad Luansang

Watch our **documentary film** about our field visit to Nepal!

△ *In the previous page, an image of the open-air activities for replanning the community in Tauchel, Mechchagaon.*

▽ *A render of how the village could look like after the reconstruction, based on the existing traditional Nevari courtyards.*

