



NEPAL EARTHQUAKE
HOUSING RECONSTRUCTION
MULTI-DONOR TRUST FUND

STORIES FROM THE FIELD

LAYING THE FOUNDATION FOR GREATER RESILIENCE





Ayush Baskota

Civil Engineer and District Coordinator for Nuwakot District
National Society for Earthquake Technology (NSET)

“I think that these kinds of trainings help in establishing a disaster resilient community—not just a house, but the whole community. We are making them aware of how to make the whole community earthquake resilient.”

Ayush Baskota, a civil engineer, is the National Society for Earthquake Technology (NSET) District Coordinator for Nuwakot District—where many residents lost their homes in the 2015 earthquake disaster. Ayush Baskota works with one of numerous NGOs involved in training local masons in resilient construction. This training is a key component of the Government of Nepal’s owner-driven housing reconstruction program. The World Bank- and MDTF-funded Earthquake Housing Reconstruction Project is financing part of the government’s housing reconstruction program work and provides the technical framework for the design of the entire housing program, regardless of the funding source. The EHRP-funded portion of the government program is focusing on 3 (including the Nuwakot District) of the 14 most-affected districts.

Ayush Baskota describes the kind of work he is doing in Nuwakot. “We are giving a seven-day training [course] to the local masons...about the importance of

earthquake-safe buildings. We also give them information on disaster risk, quality of the materials to be used, and retrofitting as well as what the role is of the engineers and the local masons in a community. They receive theory-based as well as practical hands-on training. The training is really important as the local masons also give trainings around their villages [imparting] this knowledge to those around them.”

“In the case of Thansingh Village District Committee (VDC), this is the first time that engineers have come to a village and trained the local masons. This has also helped... people...learn about the flaws in the [older] building techniques. I think that these kinds of trainings help in establishing a disaster resilient community—not just a house, but the whole community. We are making them aware of how to make the whole community earthquake resilient.” The Government Housing Reconstruction Program, with support from EHRP and the MDTF, is making resilient reconstruction a reality in Nepal.



Ram Krishna Shrestha

Local Mason/Contractor

“I think this is a big contribution for the society. People died because they didn’t know about earthquake-resilient housing.”

Ram Krishna Shrestha is a local mason and contractor in the Bidur Municipality of Nuwakot District, Nepal. Through the government housing reconstruction program many local masons, like Ram, have already received formal training in resilient construction.

Ram Krishna Shrestha reports his training experience here. “The National Society for Earthquake Technology-Nepal (NSET) told me that one can’t build [an earthquake-resilient] house without proper orientation and training. After that, I took a seven-day training [course] that made me aware of many technical aspects [of resilient construction], such as how to bend the rods, how to lay bricks, how to lay extra bars while building the stairs and double lay the wire mesh. Before the earthquake and before we got this training, we only layered single wire mesh and no extra bars for the stairs. We also learned about the load-bearing capacity of the ceilings. We were trained on all these

techniques and I am building three houses right now according to what I have learned so far.”

“I think this is a big contribution for the society. People died because they didn’t know about earthquake-resilient housing. There were people who died because the pillars of the houses broke and the whole structure collapsed. I advise everyone to consult trained masons and contractors before constructing their house from now on.”



Rukmedi Adhikari

Homeowner and Beneficiary of the Government of Nepal's Housing Reconstruction Program

“... it is very difficult to get by. The children have to be educated but no matter how hard it is, having a house is essential and therefore I have taken on this task.”

Rukmedi Adhikari (from Thansingh, Nuwakot District in Nepal) is one of many Nepalis who lost their home in the earthquakes of 2015. She is now enrolled as a beneficiary in the Government's Housing Reconstruction Program supported by both the Earthquake Housing Reconstruction Project and the Multi-Donor Trust Fund. Rukmedi Adhikari and her family have received a housing subsidy and technical support to rebuild her home with earthquake-safer techniques and materials, protecting her and her family in the event of another disaster.

Rukmedi Adhikari recounted, “Our house collapsed completely when the earthquake struck...with the paddy and corn still inside. We couldn't even take the food from inside the house. We had to bulldoze the house with the food inside and we lived in our relative's house after that.”

“The reason why we have started building the house now is that [the authorities] are giving us 2 lakhs [NPRs 200,000 equivalent to US\$2,000]. I am happy

that I am receiving the money. The Village Development Committee (VDC) Secretary [came] and advised us that the money will be deposited in [a] bank account. I didn't have a bank account before. If the money [were] given to me in cash, I wouldn't be able to save [it]. It's better if the money gets deposited in a bank account. That way, I won't spend [it] for other household items.”

“Once we started [rebuilding], we thought it better to build a concrete house ...rather than one with the old structure.” Rukmedi Adhikari is taking advice from program's engineers on how to rebuild a more resilient home. At the local level, the program provides earthquake-safer designs and technical assistance on resilient construction for homeowners throughout the affected districts in Nepal.

According to Rukmedi Adhikari, “...it is very difficult to get by. The children have to be educated but no matter how hard it is, having a house is essential and therefore I have taken on this task.”



Samir BK

Sub Engineer

National Society for Earthquake Technology-Nepal (NSET)

“We have come here to make the houses earthquake resilient....

We shouldn't just build a house, we should think about how to make it stronger.”

We have come here to make the houses earthquake resilient. The aim of NSET-Nepal is to make at least 70 percent of the houses earthquake resilient. We are training 32 local masons in coordination with the Village Development Committee (VDC) here in Thansingh (Nuwakot District), from Ward number 1 to Ward number 7. In the seven days of training, we are trying to make the masons more capable in terms of building resilient houses.

We teach them how to make the pillar-system house, how to lay the foundation, how to build the plinth beam and tie beam—how to join the beam and the pillar which should be really strong. The most vulnerable part of the house is the stairs—we teach the masons how to make that strong. If the house is not pillar-based, we teach them how to make the brick house strong without the use of pillars as well.

Not only do we discuss the houses, we also discuss the quality of the land on which the house is to be built. We talk about the

dangers of building houses on land with liquefaction, in landslide-prone areas, on banks of the river and near the big trees, etc.

In my opinion, this training plays a big role. We have already endured earthquakes in the past. We shouldn't just build a house, we should think about how to make it stronger and if the new houses are also built in the old way (without the new earthquake resilient techniques), the houses will be damaged if another earthquake strikes and the country will fall back a few years again (in terms of development).

In Nepal, people have to wait a lifetime to build one house; the economic status of Nepal is such that people can't build three or four houses. After so much difficulty, if the house gets damaged because of one earthquake, building another one is challenging. Therefore, building one house, but a strong earthquake-resilient house is very important.

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