In the wake of Gorkha Earthquake2015 and its subsequent aftershocks, Nepal Government has identified the huge need and demand of trained human resources to complete its goal of "Building Back Safer". To support to the ongoing efforts of the Government of Nepal (GON), the National Reconstruction Authority (NRA) and other ministries and departments engaged in aspects of post-earthquake reconstruction and long-term economic development, National Society for Earthquake Technology – Nepal (NSET) is implementing Housing Reconstruction Technical Assistance Project (HRTAP) with the name Baliyo Ghar (alnof[3/) Program with the core funding support from United States Agency for International Development (USAID) for the period of October 2015 - September 2020.

#BaliyoGhar program is a five-year Cooperative Agreement for Housing Reconstruction Technical Assistance with the goal of promoting earthquake safer housing reconstruction through owner-driven approaches. In response to the huge need of trained human resources required for large scale reconstruction, the #BaliyoGhar program strives to carry out multi-disciplinary trainings and orientation programs with the main objective to ensure disaster- resilient construction of houses through awareness, training, demonstration and support on code compliance. The idea is to establish and institutionalize an organized and systematic approach for Nepal's earthquake reconstruction with built-in earthquake-resistance of buildings.

NSET implements **Baliyo Ghar** program in collaboration with and under the guidance of the National Reconstruction Authority (NRA), Ministry of Urban Development (MOUD), Department of Urban Development and Building Construction (DUDBC), Ministry of Federal Affairs and Local Development (MOFALD), and other relevant ministries and departments.

# BACKGROUND

The earthquake of April 25, 2015 and the sequence of aftershocks caused 8,700 deaths and around 25,000 injuries. The Government of Nepal (GON)'s Post-Disaster Needs Assessment (PDNA), completed on June 15, 2015, found that total value of damage and losses resulting from the earthquake sequence amounted to about US\$7 billion, and reconstruction needs amounted to about US\$6.7 billion. The earthquake sequence destroyed 490,000 houses - mostly traditional mud-brick and mudstone houses built and occupied by the rural poor; and rendered another 265,000 houses at least temporarily uninhabitable. The data even high up with studies and updates of later times. The largest single need identified in the PDNA is housing and human settlements, accounting for \$3.27 billion in reconstruction costs, or almost half of the total needs.

The reconstruction need is huge and there is a high possibility that people would rebuild their houses in the traditional non-earthquakeresistant manner and non-compliant to the national building code, if they are not properly guided and supported for safer reconstruction. This makes the settlements yet more vulnerable to future earthquakes. This should be changed. Building Back should definitely be Better! Nepal's past experiences have demonstrated that if people are guided and local masons are trained, they will construct in a safe manner.

Therefore, there is a huge need for providing technical support to the people for earthquake safer reconstruction.

# **THEORY OF CHANGE**

The "Baliyo Ghar" program will contribute towards developing disaster resilient communities in Nepal by standardization of guidelines/manuals, enhanced local capacity as well as increased awareness on disaster resilient construction through development of disaster/earthquake resilient construction guideline/manual/curricula ; capacity building of construction workforce and awareness raising of community; , provided that people are able to reconstruct their houses through owner driven approach linked with compliance mechanism and financial assistance.

# **BALIYO GHAR RESULTS FRAMEWORK**

# **GUIDING PRINCIPLES**

BaliyoGhar follows following main principles that will guide the Housing Reconstruction Technical Assistance Program

- approaches,
- - Inclusion and access:



· Housing Reconstruction through owner led and owner driven

Blanket Technical Assistance Reaching to Every Household Country-led policies and processes:

Integrating DRR and promotion of disaster resilient construction: Flexibility and context specific approaches:

• Longer-term and sustainable approach:

• Follow national and international standards and practices: Robust monitoring and evaluation system:

# **TARGET GROUP**

The project targets mainly following five groups of beneficiaries at various levels

- 1. Construction workers masons (brick-lavers, stone-lavers, concrete workers), carpenters, bar-benders, contractors; termed as "mason" in general
- 2. Social mobilizers community mobilizers, social activists
- 3. Technical professionals engineers, sub-engineers, architects, structural engineers
- 4. Common people house-owners, consumer groups and other groups of people such as Mother's groups
- 5. Policy and decision makers officials at municipalities and VDCs, political leaders, officials at ministries and departments

# **INDICATORS**

# Impact Indicator

Proportion of houses reconstructed adopting disaster resilient construction methods in the program areas.

#### **Outcome Indicator**

- Number of technical guidelines/manuals/training curricula for disaster resilient construction technologies approved by government
- Proportion of houses that deploy at least one trained mason while constructing their house
- Percentage change in the perception of population on disaster resilient construction

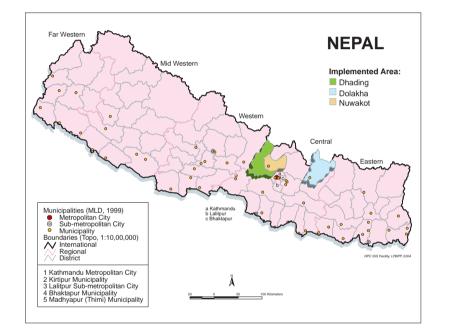
### **Output Indicator**

- Number of technical guidelines/manuals on disaster/earthquakeresistant technologies/solutions/designs for local building types adapted/developed/amended/published
- Number of Curricula for awareness and training (including instructor development) adapted/ developed/published
- Number of Instructors Trained for conducting training and awareness programs
- Number of Construction workforce (engineers, architects, contractors, masons, carpenters, bar-benders) trained on earthquake-resistant / disaster-resilient housing reconstruction
- Number of Social mobilizers trained on promoting earthquakeresistant construction technologies
- Number of Government Officials trained on promoting and implementing earthquake safer housing reconstruction program
- Number of House-owners and other common people made aware on disaster resilient construction through orientation sessions and door-to-door campaign

- Number of IEC materials (print, audio and video materials) on disaster resilient construction methods prepared and disseminated
- Number of Demonstration models on earthquake-resistant construction technology demonstrated

# **GEOGRAPHICAL COVERAGE**

The program is focused in earthquake most affected 14 districts and more specifically implemented in 3 districts: Dolakha, Dhading and Nuwakot of Nepal



#### For further details:



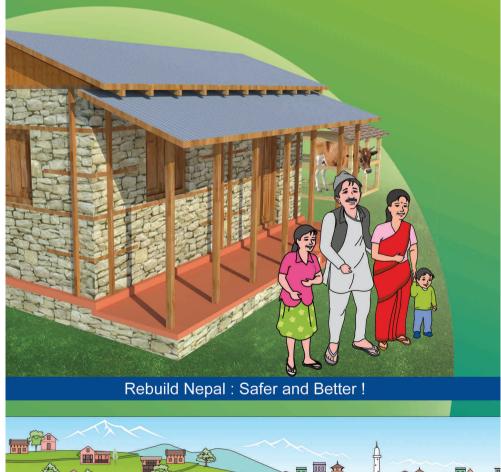
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# A program to ensure Build Back Safer in Earthquake Reconstruction









# (October 2015-September 2020)