## **Sindhupalchok Valley Assessment, Nepal**

#### Sindhupalchok District, June 2015

#### INTRODUCTION

Sindhupalchok District was severely affected by the two major earthquakes that struck Nepal on 25 April and 12 May 2015. Comprising remote and hard-to-reach valleys, this District was one of the 14 heavily affected districts, defined as Priority Districts by the Nepali government.

To ensure full coverage of the prioritized areas, and because some areas were inaccessible by 4x4 vehicles due to the severe topographical terrain, REACH conducted assessments by helicopter in remote and hard-to-reach valleys.

The Situation Overview outlines the humanitarian needs among the residents living in hard-to-reach areas of the specific District of Sindhupalchok, situated northeast of Kathmandu.

It covers communities located in three Village Development Committees (VDCs): Baramchi (in Baramchi Valley), Golche (in Golche Valley) and Helambu (in Balephi Khola Valley) and displays

when available, key information collected with regards to population & livelihoods, damage to housing; displacement; emergency shelter; WASH; damage to services and key infrastructure; and reported needs.

The present assessment complements a larger and statistically representative inter-agency shelter and settlements vulnerability assessment at the household-level, conducted in partnership with the Shelter Cluster.

#### SUMMARY OF KEY FINDINGS

The earthquakes and tremors caused large scale destruction, landslides and avalanches, resulting in heavy damage or the complete destruction of the majority of shelters, key structures and services.

In the three VDCs surveyed, households were not displaced any significant distance from their home. Despite this, a significant percentage of households did nonetheless move from their pre-crisis location: 90 % in Baramchi VDC, and 100% in both Golche and Helambu VDCs.

## REACH An initiative of IMPACT Initiatives ACTED and UNOSAT

#### SITUATION OVERVIEW

Assistance was reportedly received by some communities, and was mainly related to emergency support. While various humanitarian needs remain, access constraints are key elements to consider in order to effectively plan and provide support.



Map 1: Location map of Sindhupalchok District and assessed valleys



#### **METHODOLOGY**

Together with Rasuwa, Gorkha and Dolakha, Sindhupalchock was one of the priority districts assessed including remote and hard-to-reach valleys.

On the 2<sup>nd</sup> of June 2015, REACH teams conducted an assessment in the District's valleys, which consisted of a community discussion questionnaire and participatory mapping activity.

Due to the danger presented by landslides and broken bridges, teams were dropped by helicopter at mid- and end-line points in each valley to conduct key informant interviews and participatory mapping exercises. Additional interviews were subsequently held by phone to contextualize information gathered on-site.

Key informants were selected based on their area of knowledge, with preference given to those that had recently returned from affected areas in the assessed valleys. All data collected was transcribed on paper forms, and subsequently digitized and stored.

After each round of key informant interviews, debriefing sessions were held with the enumerators to review the reported findings and incorporate their observations.

# POPULATION & LIVELIHOODS

Key informant interviews provided some information with regards to pre-crisis population and livelihood activities in the three VDCs surveyed.

Baramchi VDC had a reported population of 4,650 people, living in 820 households. As for their precrisis livelihoods, community members reported engaging primarily in subsistence gardening, cash crop farming, wages from formal and informal jobs, and livestock keeping.

Golche VDC had a reported population of between 1,500-2,200 people, living in 200 households, with an equal ratio of males and females. Households reported a higher dependency ratio than those in other VDCs, with 10% of households having one or more disabled members and 5% caring for separated, unaccompanied or orphaned children. With regards to pre-crisis livelihoods, community members reported being engaged primarily in subsistence gardening during the summer months and mining during the winter season. More than 75% of households reported they use to keep livestock.

Helambu VDC had a reported population of 650 people, living in 130 households. As for their precrisis livelihoods, community members reported being engaged in masonry and livestock keeping.

Remittances were reported as an additional source of income.

#### DAMAGE TO HOUSING

For the three VDCs surveyed, prior to the earthquakes, houses were primarily constructed of:

- mud-bonded brick or stone with tile, slate or corrugated galvanised iron (CGI) roofing (Baramchi VDC):
- stone and mud masonry with slate roofing (Golche VDC)
- mud-bonded brick masonry with CGI roofing and some wood plank constructions (Helambu VDC)

A large majority of these houses have been damaged during the first earthquake in Baramchi and Golche VDCs (respectively 75% and 100%). In Golche VDC, poor building design and low quality materials were the top reasons given as main causes of housing damage.



Picture 1: Destruction of houses in Melamcheegaun



In Helambu VDC however, only 10% of houses were damaged. Key informants reported that damage was due to fate and poor siting.

#### DISPLACEMENT

In the three VDCs surveyed, most households were not displaced any significant distance from their home.

Despite the fact that people have reportedly stayed very close by their homes, 90% of households in Baramchi VDC, and 100% in both Golche and Helambu VDCs moved from their pre-crisis location.

It is important to specify that fear of aftershocks, as well as general fears regarding the structural safety of their home, were important reasons for such a movement. This explains the high percentage of displaced households in Helambu VDC, despite the small amount of damaged houses compared to other VDCs.

At the time of assessment, community members were mostly residing in temporary shelters on open ground within the local community (80% of households in Golche VDC and 50% in Helambu VDC), with family or friends in the local community (30% of households in Helambu VDC) or with family or friends in another community (20% of households in Helambu VDC).

Moreover, all households in both Golche and Helambu VDCs reportedly intended to stay in their current shelter for at least the next 30 days.

#### **EMERGENCY SHELTER**

In terms of assistance, the communities in Golche VDC reported having received tarpaulins and sleeping mats and blankets.



Picture 2: Emergency shelter in Golche Village (Golche VDC)

In Helambu VDC, emergency shelter assistance consisted of tarpaulins and plastic sheeting.

In both Helambu and Golche VDCs, key informants reported that some debris could be used to rebuild. However, while only light equipment and/or labour were reportedly needed for debris removal in Golche VDC, key informants reported that heavy equipment would be needed in Helambu VDC.

Temporary shelters in both VDCs have primarily been constructed from tarpaulins and plastic sheeting, with additional wood planks also used in Helambu VDC.

All assessed communities reported needing better roofing and wall materials. Communities in Helambu VDC additionally reported needing access to tools for the construction of temporary shelters, while the ones from Golche VDC were more interested in for information related to safer construction techniques.

Indeed, none of the households in the assessed VDCs had reportedly received information related to safer construction techniques. Very few households had started to rebuild at the time of data collection: fewer than 25% of households in Golche VDC, and none in Helambu.

All households in the assessed VDCs reported feeling unprotected against current weather conditions, as well as the upcoming monsoon and winter seasons.

#### **WASH**

Prior to the earthquakes, the primary source of water was tap/piped water for the three VDCs surveryed. However, the earthquakes had a significantly different impact in these locations.



In Baramchi VDC, households reported collecting water from the river or streams.

In Golche VDC, 100% of all households' water supply was reportedly affected due to the earthquakes; at the time of data collection, their primary water source was spout water. Households with toilet facilities prior to the earthquake had ordinary drop toilets; 100% of these were destroyed, leaving all households without access to toilet facilities except for a few temporary/emergency latrines.

Finally in Helambu VDC, all households reported that their water source was damaged, and that the quantity had decreased and the quality had declined. Households with toilet facilities prior to the earthquake had flush toilets with septic tanks. Less than 25% of the community's sanitation systems were affected due to the earthquakes; ordinary drop toilets were the primary toilet facilities used by households at the time of data collection.

## DAMAGE TO SERVICES & KEY INFRASTRUCTURE

#### **ELECTRICITY**

Prior to the earthquakes, community informants estimated that a high proportion of households had micro-hydropower electricity (an estimated 75-100% of households in both Baramchi and Golche

VDCs) or electricity from the main grid (an estimated 75-100% of households in Helambu VDC).

At the time of assessment, most of these households were without electricity (90% of households in Baramchi VDC and 75% of households in both Golche and Helambu VDCs).

#### **KEY INFRASTRUCTURE**

In Golche VDC, all public services – including schools, health centres and municipal service facilities – were reported to be inaccessible due to physical constraints.



Picture 3: School severely damaged after the earthquakes in Golche Village (Golche VDC)

In Helambu VDC, the local health centre was destroyed due to the earthquakes. However, it was reported that schools were still accessible.

#### REPORTED NEEDS

Communities were also asked about their priority needs and preferred modality of receiving assistance.

In Golche VDC, the top three reported priority needs were drinking water, wastewater systems and employment. Cash and bamboo were reported as the reconstruction resources needed; unfortunately, none of those are currently available in the community. CGI sheeting, timber for framing and blankets were reported as top NFI needs. Assistance could reportedly be received via porters. The community also reported that roads are clear and traversable by 4x4 vehicles; however, accessibility to some villages (10%) has been hampered due to the collapse of a suspension bridge.

In Helambu VDC, the top three reported priority needs were employment, essential non-food items, health and hygiene items. A large number of items reported as needed were reconstruction resources – including fixings and nails, milled timber, labour, cash, CGI sheeting, cement, sand and bricks – all of which were reportedly unavailable in the local community. CGI sheeting, timber for framing and sleeping items were reported as top NFI needs.



Assistance could reportedly be received only via helicopter drops, implying a reduced level of accessibility because of landslides. Indeed, out of the 40 villages in the community, only about 25% were reportedly accessible.

# ACCESS CONSTRAINTS BARAMCHI AND GOLCHE VALLEYS

The earthquakes triggered numerous landslides along the road that connects the villages from the south to the north of the Valley, which is now entirely inaccessible.

This road was allowing buses to reach Phanlamsagu during the winter, despite not being accessible during the monsoon. The inhabitants of the valley used this road to access goods and bring them back to their villages.

Access could be restored by removing the landslide deposits. However, assistance will likely need to be provided by helicopter (see Annex 1).

#### **BALEPHI KHOLA VALLEY**

The north of the Balephi Khola valley was particularly affected by the earthquakes, causing several landslides on the road and trail.

As a result of this, the usual road for supplies and goods remains passable in the south, but is currently blocked at Chhesgaun, mainly due to broken bridges and landslides.

Furthermore, all trails in the vicinity of Melamcheegaun have been damaged or blocked by landslides (see Annex 2).



Picture 4: Landslide over Golche Village

#### **About REACH Initiative**

REACH facilitates the development of information tools and products that enhance the capacity of aid actors to make evidence-based decisions in emergency, recovery and development contexts. All REACH activities are conducted through interagency aid coordination mechanisms. For more information, you can write to our global office: geneva@reach-initiative.org. Visit www.reach-intiative.org and follow us @REACH\_info.