# **Gorkha Valley Assessment, Nepal**

**Gorkha District, June 2015** 

# REACH An initiative of APPACT Initiatives ACTED and UNOSAT SITUATION OVERVIEW

# INTRODUCTION

The Gorkha Valley 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 among 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 and OCHA 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 Gorkha, situated northwest of Kathmandu.

It covers communities located in seven Village Development Committees (VDCs): four in Manaslu Valley (Bihi, Samagaon, Lho and Prok) and three in Tsum Valley (Chhekampar, Chumchet and Sirdibas).

The present assessment complements other assessments of hard-to-reach valleys, and a larger and statistically representative shelter and settlements vulnerability assessment at the household-level, conducted in partnership with the Shelter Cluster.

### **SUMMARY OF KEY FINDINGS**

The majority of housing damage reportedly occurred during the 25 April earthquake. On average, an estimated 85% of households have been displaced. These households were not displaced any significant distance from their home. Indeed, at the time of data collection, most of the displaced households were sleeping outside under tarpaulins near their damaged homes.

Shelter was indicated as a high priority for households in most of the VDCs surveyed, though it appears to be less of a priority than food security. Nearly three-quarters of the population felt unsafe living in their houses, fearing aftershocks. Additionally, more than 50% of households stated that they did not feel protected against the coming

monsoon and winter seasons. Residents indicated a desire to rebuild, however, they lacked materials (CGI, in particular) and technical expertise. Access constraints also appear to be a hindrance to the procurement of materials.



Map 1: Location map of Gorkha District and assessed valleys



### **METHODOLOGY**

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

On 1-8 June 2015, REACH conducted a joint assessment in the valley, covering seven of the more difficult to reach VDCs in the northern part of the District.

The assessment consisted of a community discussion questionnaire and a participatory mapping activity to understand access constraints and services along the route traveled between villages.

Focus group discussions were held with key informants in 13 communities

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.

# IMPACT ON MANASLU VALLEY COMMUNITIES

### **BIHI VDC**

### **DAMAGE TO HOUSING**

The village of Hinang was assessed in Bihi VDC. Houses in Hinang were constructed primarily of stone with timber plank roofing. It was reported that an estimated 50-75% of houses were damaged during the first earthquake, while up to an additional 25% were damaged during the second earthquake.

Poor building design and poor construction practices were the top two reasons given by affected households as main causes of housing damage.

### DISPLACEMENT

It was reported that no households in Hinang had been displaced as a result of the earthquakes, despite the reported housing damage.

### **EMERGENCY SHELTER**

Since the earthquakes, the community has reportedly received temporary shelter assistance in the form of tents. Households reported that debris can be used to repair or rebuild their houses, and that light equipment and/or labour assistance was needed for debris removal.

The community reported that their top three emergency shelter needs were training on safer construction techniques, technical assistance and CGI sheeting. An estimated 50 to 75% of households reported feeling protected against current weather conditions, as well as the upcoming monsoon season; however less than 25% felt protected for the upcoming winter season.

# DAMAGE TO SERVICES & KEY INFRASTRUCTURE

Prior to the earthquakes, an estimated 75-100% of households reportedly had electricity via microhydroelectric power; they continued to have electricity following the earthquakes.

Prior to the earthquakes, education, health and other community services were already reported to be lacking and were still reported as a need at the time of data collection. The primary school was reported to have begun operating again, but attendance was low, perhaps due to access constraints and fear of safety. There were no telecommunications services functioning when the VDC was assessed.

#### WASH

The VDC has previously and was still, at the time of assessment, depending on unimproved surface and groundwater sources.



Open defecation was common throughout the VDC as most toilets (pit latrines, most commonly) were destroyed during the earthquakes.

#### REPORTED NEEDS

At the time of data collection, between 50-75% of households had begun making repairs to their houses after the first earthquake and prior to the second. Milled timber, training, cement and CGI were reported as the most needed reconstruction resources. Many households had access to wood to repair or replace the timber plank roofing. However, the harvesting of wood has reportedly been limited by the Manaslu Conservation Area Project as an environmental conservation measure. The community did not report any essential NFI needs.

### **SAMAGAON VDC**

### **POPULATION\***

The villages of Samdo and Samagaon were assessed in Samagaon VDC. According to key informant interviews, Samdo had a reported population of 103 people, living in 40 households; and Samagaon had a population of 600 people, living in 280 households.

### DAMAGE TO HOUSING

Houses in Samdo were constructed primarily of stone masonry with CGI or slate/tile roofing, while those in Samagaon were constructed primarily of stone masonry with slate/tile roofing.



Picture 1: Damaged community campsite in Samagaon VDC

Both villages reported that an estimated 75-99% of houses were damaged during the first earthquake, while up to an additional 1-25% were damaged during the second earthquake.

Poor construction practices were cited as main causes of housing damage in both villages. The village of Samagaon also cited neglect in keeping the houses in good condition as a cause.

### DISPLACEMENT

It was reported that no households in Samdo had been displaced as a result of the earthquakes

despite the reported housing damage. Samdo reportedly had only 1-2 completely uninhabitable houses. However, Samagaon reported that an estimated 80-90% of residents were sleeping under tarps.

#### **EMERGENCY SHELTER**

Since the earthquakes, both communities have reportedly received tents for temporary shelter assistance; Samagaon has also received cash assistance. Both communities reported that debris could be used to repair or rebuild their houses and that light equipment and/or labour assistance were needed for debris removal in Samdo, while heavy equipment was reportedly needed for debris removal in Samagaon.

Samdo reported that their top three emergency shelter needs were CGI sheeting, technical assistance and timber. Samagaon's reported top three emergency shelter needs also included CGI roofing, in addition to cement and bricks.

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

<sup>\*</sup>Population data comes from the joint inter-agency shelter and settlements vulnerability assessment. It is based on a survey conducted by OCHA.

# DAMAGE TO SERVICES & KEY INFRASTRUCTURE

The hydroelectric power plant in Samagaon has reportedly been broken since the earthquakes and households continued to be without electricity at the time of assessment.

The primary school was reported to have begun operating again, and students in Samagaon have started returning to school.

The phone tower in Samagaon, which used to serve communities down the valley from Samagaon as well, was reportedly not functioning.

### **WASH**

The quantity of water reaching taps in Samdo has been reduced but water quality did not appear to have been affected. However, in Samagaon, a higher rate of sedimentation was reported and several taps have been damaged. Samdo reported 100% open defecation, primarily due to damage to sanitation facilities. Similarly, most toilet facilities in Samagaon have been damaged and are unusable.

### REPORTED NEEDS

In Samdo, it was reported that many people had not yet started rebuilding due to a shortage of labour and fear of more earthquakes. Equally, Samagaon reported that no rebuilding had yet started at the

time of the assessment. Milled timber and CGI were reported as the most needed reconstruction resources in Samdo, while cash and bricks were reported in Samagaon.

Samdo reported that they could procure CGI, cement, iron rods and tools from Tibet using yaks, though it is a two-day journey. Bricks were the only resource reported as being easily accessible.

Both communities reported having received some information related to safer construction techniques. They did not report any essential NFI needs.

### **LHO VDC**

### **POPULATION\***

In Lho VDC, the three villages of Lho, Lhi and Syo were assessed. Lho reported a population of 342, living in 124 households; Lhi and Syo had a combined population of 675, living in 175 households.

#### DAMAGE TO HOUSING

Houses in all three villages were constructed primarily of stone masonry with wood plank roofing. In Lho, it was reported that an estimated 75-99% of houses were damaged during the first earthquake; which was also the case but to a lesser extent in Lhi and Syo, where an estimated 50-75% of houses

were damaged. Up to an additional 25% were damaged during the second earthquake in all three villages. Poor building design and poor construction practices were the top reasons given as causes of housing damage.

### DISPLACEMENT

It was reported that no households in any of the communities had been displaced as a result of the earthquakes, despite the reported housing damage.

### **EMERGENCY SHELTER**

Since the earthquakes, all three communities have reportedly received tents for temporary shelter assistance; Lho has also received cash assistance. All communities reported that debris could be used to repair or rebuild their houses and that light equipment and/or labour assistance were needed for debris removal.

Lho reported that their top three emergency shelter needs were CGI sheeting, better wall materials and better roofing materials. Lhi and Syo reported that their top three emergency shelter needs were technical assistance, timber and CGI sheeting.

In Lhi and Syo, an estimated 50-75% of households reported feeling protected against current weather conditions, as well as the upcoming monsoon and winter seasons. However, the FGD indicated that



shelter was a major concern for both monsoon and winter. The village of Lho felt less protected, with only an estimated 1-25% of households feeling protected.

# DAMAGE TO SERVICES AND KEY INFRASTRUCTURE

Prior to the earthquakes, no households in these communities had electricity.

The primary school was reported to have begun operating again, but attendance was low at the time of data collection, perhaps due to access constraints and fear of safety.

### WASH

The hydroelectric power plant has been in disrepair for many years. In Lhi, the intake for the water distribution, including irrigation, was damaged. Additionally, pipes were broken, resulting in reduced, unreliable and sometimes muddy water. In Lho, open defecation was common, as it was already the case before the earthquakes.

### REPORTED NEEDS

At the time of assessment, between 26-75% of households (fewer in Lho than Lhi and Syo) had begun making repairs to their houses after the

first earthquake and prior to the second. Milled timber and CGI were reported as the most needed reconstruction resources in all three villages. Lhi and Syo also reported needing training in reconstruction methods. The community of Lhi indicated their willingness to clear fields so that CGI could be dropped. None of the three communities reported any essential NFI needs.

### **PROK VDC**

### **POPULATION\***

Two villages were assessed in Prok VDC, Gap and Namrung. Gap reported a population of 1,070, living in 180 households. Namrung reported a population of 150 people, living in 34 households.

### DAMAGE TO HOUSING

Houses in Gap were constructed primarily of stone masonry with timber plank roofing, or timber plank walls with CGI roofing. Houses in Namrung were constructed primarily of timber plank walls with either timber plank or CGI roofing.

It was reported that, in both villages, an estimated 50-75% of houses were damaged during the first earthquake, while up to an additional 25% were damaged during the second earthquake. Damage was greater in some areas than others, particularly

up the valley from Namrung where it appeared no one was residing any longer. Poor building design and poor construction practices were the top two reasons given as main reasons for housing damage.

#### **EMERGENCY SHELTER**

Since the earthquakes, both communities have received tents for temporary shelter assistance. They reported that debris can be used to repair or rebuild their houses and that light equipment and/or labour assistance is needed for debris removal.

Gap reported that their top three emergency shelter needs were CGI roofing, technical assistance and information on safer reconstruction methods. Namrung's top three reported shelter needs also included timber in addition CGI roofing and technical assistance. Only 26 to 50% of households in Gap reported feeling protected against current weather conditions, as well as the upcoming monsoon season; however, less than 25% felt protected for the upcoming winter season. Households in Namrung reported feeling more protected than Gap, with more than 75% of households reporting feeling protected against current weather conditions and the upcoming monsoon season, and 51-75% against the winter season.



<sup>\*</sup>Population data comes from the joint inter-agency shelter and settlements vulnerability assessment. It is based on a survey conducted by OCHA.

# DAMAGE TO SERVICES AND KEY INFRASTRUCTURE

Prior to the earthquakes, an estimated 25-50% of households in Gap had micro-hydroelectric power, while 76-99% had micro-hydroelectric power in Namrung. Electrical services were reported not to have been disrupted following the earthquakes.

The primary school was reported to have begun operating again, but attendance is low, perhaps due to access constraints and fear of safety.

### **WASH**

Namrung reported 100% open defecation, primarily due to damage to sanitation facilities.

### **REPORTED NEEDS**

At the time of assessment, between 50-75% of households had begun making repairs to their houses after the first earthquake and prior to the second. Milled timber, training and CGI were reported as the most needed reconstruction resources in both communities.

The communities did not report any essential NFI needs.

# IMPACT ON TSUM VALLEY COMMUNITIES

### CHHEKAMPAR VDC

Communities in nine wards were assessed in Chhekampar VDC in three groupings – wards 1 and 2, wards 3-6 and wards 7-9.

### DAMAGE TO HOUSING

Prior to the earthquakes, houses in wards 1 and 2 were constructed of either mud-bonded brick/stone with tile/slate roofing, or wood plank walls with CGI roofing. Between 76 and 99% of houses in these two wards reportedly sustained damage during the first earthquake.

Houses in wards 3-6 were constructed of either wood plank walls with tile/slate roofing, or mudbonded brick/stone with CGI roofing. Houses in wards 7-9 were constructed of either wood plank walls with tile/slate roofing, or mud-bonded brick/stone with wood plank roofing.

Between 26 and 50% of houses in wards 3-6 and wards 7-9 reportedly sustained damage during the first earthquake. Poor building design and construction practices were the top two reasons given as main causes of housing damage in all wards.

### DISPLACEMENT

It was reported that between 76 and 99% of households were displaced in wards 1-2, only 20% of whom intend to return to living in their preearthquake house within the coming month. Wards 3-6 reported fewer displaced households (26 to 50%), 60% of whom intend to return to their houses within the coming month. Despite a higher reported number of displaced households in wards 7-9 (51 to 75%), 60% intended to return to their houses within the coming month.

### **EMERGENCY SHELTER**

Since the earthquakes, all three communities have reportedly received tents, tarpaulins and cash as temporary shelter assistance. Wards 1 and 2 also reported receiving blankets/mats and CGI sheeting; wards 3-6 received kitchen sets; and wards 7-9 received blankets/mats and tools. All communities reported that debris could be used to repair or rebuild their houses and that light equipment and/or labour assistance were needed for debris removal.

Many of the displaced households in each of the communities were using tarpaulins as a roof covering for their current shelters at the time of assessment. Wards 1 and 2 and wards 3-6 were also using wood planks for walls and roofing material.

All wards in Chhemkampar reported CGI sheeting and information on safer construction techniques



as two of their top three emergency shelter needs. Wards 1 and 2 and wards 3-6 also cited technical assistance as a top need, while wards 7-9 cited tools as a top need.

In wards 1 and 2, less than 25% of households reported feeling protected against current weather conditions, as well as the upcoming monsoon and winter seasons; in wards 3-9, slightly more households (25-50%) reported feeling protected against current weather conditions, as well as the upcoming monsoon and winter seasons.

# DAMAGE TO SERVICES & KEY INFRASTRUCTURE

Prior to the earthquakes, reportedly 76-99% of households in wards 1 and 2 and wards 3-6 had micro-hydroelectric power, while only 26-50% of households in wards 7-9 reported having electricity. Since the earthquakes, less than 25% of households in wards 1 and 2 reported having electricity via solar power, while 26-50% of households in wards 3-6 and wards 7-9 were still connected to the microhydropower grid following the earthquakes.

### WASH

Unimproved surface and groundwater were reportedly the primary water sources throughout the VDC.

#### REPORTED NEEDS

Between 1-25% of households in all wards had begun making repairs to their houses after the first earthquake and prior to the second. Of the nine wards assessed, nails, chainsaws, cement, cash and CGI were reported as the most needed reconstruction resources. Wards 1 and 2 also indicated fuel and training; wards 7-9 indicated stone as a needed resource.

The communities did not report any essential NFI needs.

## **CHUMCHET VDC**

### **POPULATION\***

Three communities – Chumling, Lokpa and Sipchet—were assessed in Chumchet VDC. At the time of the assessment, the village of Chumling had a reported population of 100 people, living in 17 households; Lokpa had a population of 95 people, living in 20 households; and Sipchet had a population of 250 people, living in 37 households.

### **DAMAGE TO HOUSING**

Houses in Chumling were constructed of either mud-bonded brick/stone with tile/slate roofing, or wood plank walls with wood plank roofing. It was reported that 51-75% of houses in Chumling were damaged during the first earthquake.

Houses in Lokpa were constructed of either mudbonded brick/stone with thatch/straw roofing, or timber plank walls with timber plank roofing. It was reported that 76-99% of houses in Lokpa were damaged during the first earthquake.

Houses in Sipchet were constructed of either mudbonded brick/stone with thatch/straw roofing, or wood plank walls with wood plank roofing. There, 100% of houses were damaged during the first earthquake.

Poor building design, poor construction practices and neglect in keeping the houses in good condition were the top three reasons given as main causes of housing damage in all three communities.



Picture 2: Completely destroyed home in Sipchet Ward 2

### DISPLACEMENT

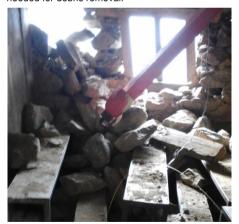
80% of households were reportedly displaced in Chumling, while Lokpa and Sipchet both reported

<sup>\*</sup>Population data comes from the joint inter-agency shelter and settlements vulnerability assessment. It is based on a survey conducted by OCHA.

100% displacement as a result of the earthquakes. These households were not displaced any significant distance from their home.

### **EMERGENCY SHELTER**

Since the earthquakes, all three communities have received tarpaulins and cash for temporary shelter assistance. Chumling reported that they also received blankets/mats and tents; Sipchet additionally received blankets/mats and Lopka received tools and CGI. All reported that debris could be used to repair or rebuild their houses and that light equipment and/or labour assistance is needed for debris removal.



Picture 3: Damaged primary school in Lokpa VDC

All three communities reported technical assistance as one of their top three emergency shelter needs. Chumling indicated the need for information on safer construction techniques and CGI roofing. Lopka also indicated needing information on safer construction techniques, in addition to tools. Sipchet's top need was CGI roofing followed by nails.

While an estimated 26-75% of households in each of the three communities reported feeling protected against current weather conditions (lowest in Sipchet), none of them felt protect against the upcoming monsoon and winter seasons.

# DAMAGE TO SERVICES & KEY INFRASTRUCTURE

Prior to the earthquakes, an estimated 75-99% of households had micro-hydroelectric power in both Chumling and Sipchet; since the earthquakes, only 26-50% households in these communities have electricity. Electricity supply has remained the same in Lopka before and after the earthquakes, where less than 25% of households had a solar power source.

### WASH

Spichet reported that all households were practicing open defecation, primarily due to damage to sanitation facilities. The community of Sipchet also reported a shift from the use of piped water to wells, indicating damage to their pre-earthquake water

source. Other parts of Chumchet VDC continue to rely on unimproved surface and groundwater sources.

### REPORTED NEEDS

Less than 25% of households had begun making repairs to their houses after the first earthquake and prior to the second. Nails, chainsaws, CGI, training, cash and fuel were reported as the most needed reconstruction resources in all three villages. Cement was also cited as a need in Chumling and Lopka, while straw or thatch was cited in Spichet. Labour was cited in Chumling and Sipchet.

Lopka did not report any essential NFI needs. However, Chumling and Spichet both indicated a need for hygiene items and, Chumling alone, a need for kitchen items.

### SIRDIBAS VDC

### **POPULATION\***

At the time of the assessment, the village of Phillim in Sirdibas VDC had a reported population of 450 people, living in 98 households.

### **DAMAGE TO HOUSING**

Houses in Phillim were reportedly constructed either of timber planks with CGI roofing, or unbaked



bricks with stone/slate roofing. It was reported that only 25% of houses were damaged during the first earthquake, with no additional damage during the second earthquake.

Poor building design and poor construction practices were the top two reasons given as main causes of housing damage.

### DISPLACEMENT

Less than 25% households in Phillim had been displaced as a result of the earthquakes (but stayed very close to their homes), all of whom intend to return to living in their pre-earthquake houses within the coming month.

### **EMERGENCY SHELTER**

Since the earthquakes, the community had reportedly received tarpaulins, tents, blankets/ mats and cash for temporary shelter assistance. Tarpaulins were being used as both wall and roofing material, in addition to wood planks, bamboo, and some CGI. They reported that debris could be used to repair or rebuild their houses and that light equipment and/or labour assistance were needed for debris removal. The community reported that their top three emergency shelter needs were CGI sheeting, cement and nails. The majority of households (51 to 75%) reported feeling protected against current weather conditions, as well as the upcoming monsoon and winter seasons.

# DAMAGE TO SERVICES & KEY INFRASTRUCTURE

Prior to the earthquakes, 76-99% of households reportedly had solar power electricity; with only 51-75% with electricity following the earthquakes.

### REPORTED NEEDS

At the time of data collection, less than 25% of households had begun making repairs to their houses after the first earthquake and prior to the second. CGI, cement and cash were reported as the most needed reconstruction resources, in addition to chainsaws, nails, thatch/straw and training. The community did not report any essential NFI needs.

### **ACCESS CONSTRAINTS**

Access was a primary concern expressed in all assessed VDCs. All seven VDCs in northern Gorkha District were reportedly typically inaccessible by vehicles. Instead, settlements were connected by trails and accessible only by foot or with pack animals. Since the earthquakes, active landslides, particularly in the eastern VDCs, have made passage on trails hazardous if at all possible. In other cases, landslides, mudslides and rock fall have damaged or blocked routes.

Safe passage and routes for moving goods into and out of the region are limited, and in Chhekampar and



Picture 4: Impassable trail to Sipchet

Chumchet VDCs, access is possible by helicopter only. Communities remain fearful of movement given the risk of landslides. A combination of fear and hazardous access has led to low attendance rates despite reports that some schools have resumed operations.

### **About REACH Initiative**

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