

OVERVIEW

# NEPAL 2015 / EARTHQUAKE

**CRISIS** Nepal earthquakes, 25 April and 12 May 2015

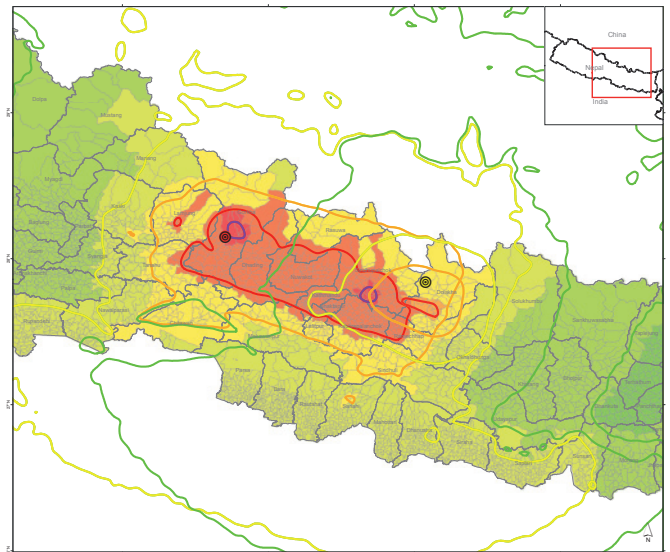
**TOTAL HOUSES DAMAGED** 604,930 fully damaged  
288,856 destroyed  
(Source: National Disaster Report 2015, Ministry of Home Affairs).

**TOTAL PEOPLE AFFECTED** 886,456 households affected  
649,815 households displaced

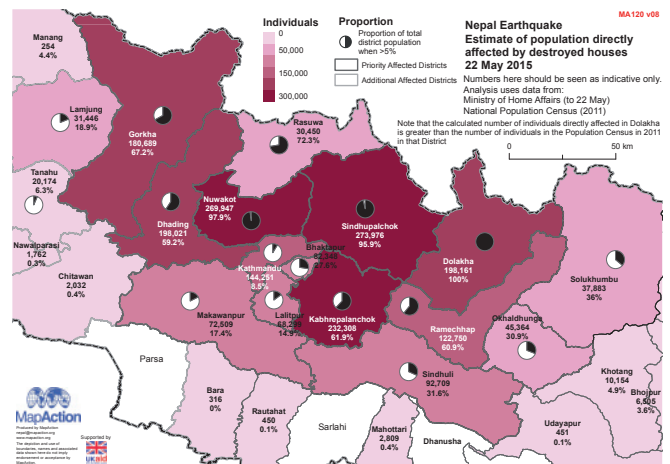
**HOUSEHOLDS SUPPORTED** Emergency phase: 700,000  
Self-recovery phase: 600,000  
Winterization: 244,158

**RESPONSE OUTPUTS** (households)

736,743 tarpaulins  
402,070 blankets  
484,765 Cash For Shelters  
214,392 CGI Sheets Bundles



Location and intensity of the two major earthquakes (Source: Mapaction).



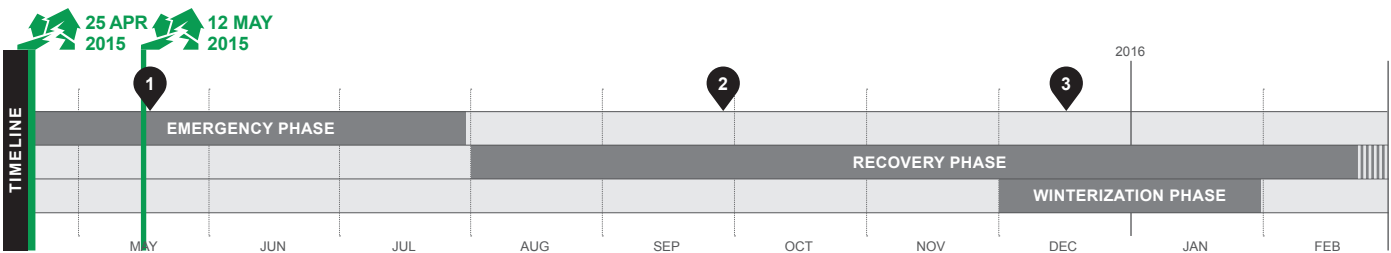
Estimate of population directly affected by destroyed houses - 22 May 2015 (Source: Mapaction). Damage varied greatly by location.



People inspect their homes, affected by the earthquake, to salvage materials and look for personal belongings.

SUMMARY OF THE RESPONSE

Two major earthquakes struck Nepal in April and May 2015, affecting around 6 million people. The government called for humanitarian assistance and the international community supported the response in the 14 most-affected districts, through three main phases: emergency relief, supporting self-recovery, and winterization. After the initial phase, characterized mainly by in-kind distributions, cash-based assistance became the preferred modality for this response.



- 1 Mid-May 2015: Cluster coordination set up at national level.
- 2 Late Sep 2015: Blockade imposed by the Government of India.
- 3 Dec 2015: Shelter Cluster handover.



The first step in the response is to assess the damage, and then clear the rubble to allow recovery efforts to start.

### SITUATION BEFORE THE DISASTER

Nepal is significantly **at risk to natural disasters**, in particular climate change, earthquakes and flooding<sup>1</sup>. Around 25.2% of its population live below the poverty line<sup>2</sup>. **High poverty levels**, especially in rural areas, have led to significant migration of young men to cities and overseas (44% households have at least one absentee). This has also led to concerns about social and economic vulnerability of women left behind in the remote, hilly and mountain regions of rural Nepal that were most affected by the 2015 earthquakes.

Politically, the country was struggling to meet demands raised by different interest groups in a **peace process after a decade-long armed conflict**. Political transition and attainment of peace has overshadowed economic development and humanitarian issues. Rapid and unplanned urbanization, migration of youth, frequent street demonstrations and strikes, and lack of law and order have added to the humanitarian challenges. The residual effects of the conflict were still to be solved with rapid change in political, social and economic situation of the country, and affected both the earthquake response and recovery operations.

In a country that has experienced humanitarian responses to both natural disaster and conflict, the Government of Nepal has **invested significantly in institutional preparedness and coordination**. At the sectoral level, this meant that shelter agencies had a clear government partner and that there was overall government direction and ownership of the response, especially through the Department of Urban Development and Building Construction.

Prior to the 2015 earthquake, Nepal had worked to **improve housing regulations, settlement and land rights**, as well as promoting safer land usage and building practices through the introduction of land and building acts, codes and professional bodies. Despite this, **the vast majority of houses in rural Nepal were non-engineered and self-built**.

<sup>1</sup> Nepal country profile, <http://bit.ly/2kvizAI>.

<sup>2</sup> UNDP's human development index.

### SITUATION AFTER THE DISASTER

On 25 April 2015, a 7.8 magnitude earthquake struck Nepal, with its epicentre 81km north-west of the capital Kathmandu. This was followed on 12 May by a 7.3 magnitude earthquake that struck the district of Dolakha, leading to further loss of life and building damage, and increasing the humanitarian needs. A total of 8,857 people died, around 6 million people were directly affected.

Given the enormity of the destruction caused by the earthquakes and the threat of the coming Himalayan winter, a **major national and international response was mobilized**, including the activation of the cluster system. More than 300 organizations registered with the Shelter Cluster and the Nepal Government and private sector organizations. These reacted quickly and at scale, focusing on needs in the 14 priority districts for which the government had requested international assistance, **targeting 712,725 houses** (or 80% of the total damage to housing stock)<sup>3</sup>.

The large-scale destruction of housing resulted from the **seismic vulnerability of the predominant housing typology**, which consisted of unreinforced masonry, either low strength stone or brick masonry with mud mortar, without seismic-resilient features. Other common building types, such as cement-mortared masonry and reinforced-concrete frame buildings, were somewhat better off but still suffered significantly, due to deficiencies in material, design, detailing and craftsmanship. The traditional housing typologies were built, upgraded and expanded by the households themselves, with limited knowledge of seismic-safe techniques and standards.

**Female members were generally doing the majority of the unskilled tasks** involving carrying the water, collecting construction materials, mixing the mortar, digging the soil for the foundations or other housing components, while men or qualified builders actually managed the construction process. According to the government's Post Disaster Needs Assessment,

<sup>3</sup> For more on the Cluster set-up and coordination structure, see case study A.4.





Many people were forced to relocate temporarily due to the destruction caused by the earthquakes. In some cases, entire villages had to build temporary structures near their destroyed or damaged homes.

about 26% of the damaged houses belonged to female-headed households, 41% to Dalits (belonging to the lowest caste) and indigenous communities, and 23% to senior citizens. **These groups were found to be disproportionately affected** by the earthquakes and were identified as the most vulnerable, due to their low socio-economic status and limited capacity to contribute as workforce to the reconstruction process. Also, by being the larger grouping with limited ownership of land and housing, single women, Dalits and indigenous communities were indicated as more likely to face difficulties in accessing and benefiting from housing reconstruction programmes.

In particular, **female-headed households** were found more likely to report feeling unprepared for the forthcoming monsoon season, and less likely to have begun repair or reconstruction of their shelters, although they were often financially better off as they received remittances. In Nepal, the world's second biggest remittance economy, women and elderly are often left alone to look after the children, livestock or crops, while adult men migrate to India or the Middle East to work in construction.

Additionally, **subsistence-based households in rural areas were particularly affected**, as the disaster happened only a few weeks prior to the start of the rice paddy fields planting season.

## SHELTER RESPONSE

### A. EMERGENCY AND RELIEF SHELTERING

The initial phase aimed to respond to the immediate shelter needs of the population with damaged or destroyed houses, located in the affected locations, in each of the following categories: Hard to Reach, Rural, and Peri-Urban/Urban. Emergency sheltering was seen as a first step to progressively contribute to self-recovery and more durable solutions (appropriate to the needs and context) through the provision of key in-kind shelter items, NFIs and/or cash-transfer programmes. Information, Education and Communication material, training

and follow-up technical assistance were integral components of this phase and were essential to ensure effective and safe use of shelter materials<sup>4</sup>.

An emphasis in this response was the **use of cash payments**. While relief agencies and private sector responders often initially focussed on in-kind distribution, **the government response involved an initial disbursement of unconditional cash**. This was later taken-up more and more by relief agencies, especially as supplementary winterization assistance. Cash was also used as a substitute for in-kind items when the political dispute between Nepal and India resulted in border closures and agencies were unable to obtain fuel for distributions, or to import relief items from India. **Cash allowed affected families to choose** how best they could start the process of recovery, by buying items they needed most. While some families used these funds to pay medical bills or to write off debts, around 80% of the unconditional emergency cash grants made at the beginning of the response were used to purchase shelter-related items.

**In the emergency phase, an estimated 700,000 families** received emergency assistance, consisting of **cash and/or tarpaulins and non-food items** – more than 90% of the households in need of assistance in the 14 priority districts.

### B. SELF-RECOVERY

The overarching objective of this phase was for agencies to **identify response options that supported self-recovery**, to reduce disruption and ensure smooth transition for affected populations to rebuild<sup>5</sup>. The process for selecting response options had to consider recipient choice and the unique set of contextual circumstances and conditions. The products and assistance provided for temporary shelter needed to support

<sup>4</sup> See case study A.5 as an example of the emergency relief phase of the response.

<sup>5</sup> See case study A.6 as an example of projects that supported affected people's self-recovery.





People salvaged personal belongings from destroyed houses.

a smooth transition to safe permanent reconstruction. Ideally, assistance should be reusable, re-saleable and transferable, upgradable or extendable. Specific interventions included CGI-sheets and toolkits (or their cash equivalents) and training, such as masonry training and community training around key Build-Back-Safer messages. **In the self-recovery phase, approximately 600,000 families received corrugated iron sheets or the cash equivalent** – again, more than 90% of the households that had been reported as fully damaged.

### C. WINTERIZATION

Analysis of the population density above 2,000m, combined with damage data, indicated that there was a “population of concern” of about 200,000 households living above the snow-line in temporary shelter. Consequently, a winterization package – and cash equivalent – was developed, focusing on personal insulation and ensuring a “one warm room” approach, by providing an insulated floor, wind-proofing wall and water-proofing roof<sup>6</sup>. **Approximately 244,158 households living in temporary shelter above 1,500m received winterization assistance.**

### CHALLENGES TO THE RESPONSE

**Political unrest in southern Nepal** broke out in September 2015, following the parliament’s decision to pass a new constitution (foreshadowing wide administrative changes and affecting Indian political influence in Kathmandu). This seriously impeded the humanitarian effort. **A resulting blockade** starting in late September 2015 and lasting six months led to a **critical shortage of fuel and relief supplies**, with queues at gas stations reportedly up to 5km long. In addition, the Nepal Parliament’s failure to ratify a bill introducing the National Reconstruction Authority meant that **there was no overall agency charged with managing earthquake recovery** programmes. Delays in key policy decisions – especially around housing subsidies – further hindered the response.

There were **significant logistical challenges in reaching remote and mountainous areas**, where access to markets is limited. In these areas, organizations supplied relief items in-kind, like tarpaulins, roofing materials, blankets, clothes and kitchen utensils. However, many switched to emergency cash distributions during the fuel crisis.

In certain high altitude districts like Gorkha, the response was particularly strong. These districts obtained greater attention owing to levels of damage, the numbers of NGOs working

<sup>6</sup> For an example of winterization project, see case study A.7.



Houses were repaired also using the materials provided by humanitarian organizations, such as CGI sheets and timber.

there, as well as extraneous reasons, such as the connections with the British Army Gorkha Regiment. However, lower altitude districts and those stuck by the second earthquake received less assistance. Concerns were raised that **the unevenness of the early humanitarian response** set the course for quicker recovery in some districts than in others.

As in all humanitarian responses, statistics are not always solid and while they can paint broad trends, they may be misleading if taken literally. Relatively high overall statistical percentages of households who received assistance masked the fact that **some districts received more assistance than others, while needs in some areas were actually higher** than the numbers initially estimated. Agencies on the ground continued to report humanitarian needs and gaps, even in the districts that had received the highest amounts of aid.

### FUTURE DIRECTIONS

While the overall humanitarian response to the Nepal earthquakes of 2015 was an effective one, with very high coverage, there are a number of lessons to be drawn.

**Firstly, cash-based assistance became a preferred modality** later in the response<sup>7</sup> – especially after the border closures – and it became virtually impossible to import or transport relief items in-kind. While cash was better than nothing, it still came with **significant limitations for those living in remote rural areas**, and there was little overall cash coordination or market analysis done by any of the clusters.

**Secondly, Nepal has a vibrant private sector.** A mapping exercise conducted by the Shelter Cluster showed that – from a handful of organizations surveyed – the private sector had distributed an additional 20% of shelter-related assistance than that already tracked from more traditional humanitarian agencies. **There is a clear need for the humanitarian sector to engage more closely with the private sector** in Nepal.

**Thirdly, pre-existing coordination structures and relationships**, developed during the preparedness phase, **were crucial in ensuring good links between humanitarian agencies and the government**, and it will be important to further invest in these connections for the future.

*The case studies that follow focus on the coordination structure adopted in this response (A.4) and by showing some of the response modalities adopted by humanitarian organizations in the emergency and transitional phases (A.5 to A.7).*

<sup>7</sup> See diagram on page viii, in the introduction.