

Nepal Earthquake: Number of People in Need (as of 22 May)



Because of the specific nature of the impact of the earthquake, the condition of houses is considered to be the most relevant proxy indicator for people in need. Whilst it is acknowledged that using shelter as the key indicator is not completely inclusive of all possible groups in need (e.g. children not in school, people with changed access to health care) there is a strong correlation between shelter conditions and other needs including the potential loss of food or seed stocks; damage of WASH facilities, and exposure to increased protection risks.

The GoN damaged buildings dataset is used. In addition to this being the figures accepted by the GoN, there is also a lack of other conclusive and complete datasets. The use of a single proxy limits over-estimation by eliminating the possibility of re-counting individuals with a number of different needs. This dataset is currently only complete at the district level and therefore no disaggregation is possible between different VDCs within a district. However, the secondary datasets used to calculate subsets are already available at the VDC level, and thus a more disaggregated analysis can be conducted once suitable data on damaged buildings at VDC-level is available.

A distinction needs to be made between *people in need* and *people affected*. Specifically, people in need are considered as those who require assistance to be able to rebuild their lives. Only the 14 most affected districts as designated by the GoN have been included in the following values (although the figures can be expanded to include other districts as required).

Methodology

The summation of both fully and partially damaged households is multiplied by the average household size. The GoN define a “damaged” household as one that cannot be repaired and must be demolished and reconstructed. “Partially damaged” houses are those which are repairable, though this is not a direct indication of whether the shelter is currently habitable or uninhabitable. This value for people in need is therefore indicative of the population who have incurred some losses due to the earthquake, some of which are likely to be presently resorting to temporary shelter solutions, whilst others are continuing to reside in damaged residences.

Immediate Need Subset

This subset identifies a smaller number from the previously calculated population who are in immediate need due to the impact of poverty and accessibility. It overlays the previously calculated population with the proportion of poverty within each district, and then further overlays WFP logistic cluster estimates regarding accessibility into remote VDCs. The values assume that:

- a) For areas without road accessibility, fully and partially damaged households are all in need of urgent assistance, regardless of the poverty threshold, as they will encounter significant logistical challenges.
- b) For areas where there is road access, fully and partially damaged households are considered in urgent need if they are below the poverty line in that district. These values are representative of the population who it is considered have the most limited capacity to recover any earthquake losses due to their pre-existing financial circumstances. It is probable that there are others that are in similar circumstances but do not meet the poverty threshold to be included in these calculations.

Limitations

- This method provides a cross-cluster estimation of overall caseload using suitable proxy indicators. Caseloads for individual clusters are likely to differ, with each cluster deciding on their own methodology for its calculation. In its absence, these figures provide a base planning assumption.
- Once cluster figures are available, this methodology may be revised to take into account differences, particularly those which lead to cluster-specific 'people in need' figures higher than the ones in this model.
- The poverty subset assumes uniform impact of destruction on people above and below the poverty line. In reality, poverty may be correlated both with lower impact (low-quality low-rise housing less likely to be destroyed or easier to rebuild), or higher impact (lack of resources to rebuild, repair or resupply).
- This estimate is focused on people in need rather than a more comprehensive severity ranking. The latter, based on a composite index of a larger range of factors including baseline, impact and vulnerability indicators is also being made available.

District	Baseline Data			Post EQ Data			People in Need Calculations			
	Population	Average HH Size	% Pop. in Poverty	% Pop. no Road Access	No. Houses Destroyed	No. Houses Damaged	People in Need	% Pop. in Need	Subset in immediate need	% Pop. in immediate need
Okhaldhunga	147,984	4.55	20.5%	25.7%	10031	3107	59,818	40.4%	24,485	16.5%
Sindhuli	296,192	5.14	38.3%	0.0%	18197	10028	145,187	49.0%	55,607	18.8%
Ramechhap	202,646	4.62	25.6%	16.4%	26743	13173	184,214	90.9%	69,636	34.4%
Dolakha	186,557	4.08	26.0%	32.1%	48880	3120	212,331	113.8%	105,643	56.6%
Sindhupalchok	287,798	4.32	25.4%	35.5%	63885	2751	287,574	99.9%	149,202	51.8%
Kabhrpalanchok	381,937	4.73	13.9%	10.5%	49933	23714	348,470	91.2%	79,941	20.9%
Lalitpur	468,132	4.26	7.6%	0.0%	16344	5851	94,631	20.2%	7,192	1.5%
Bhaktapur	304,651	4.44	12.5%	0.0%	18900	9090	124,238	40.8%	15,530	5.1%
Kathmandu	1,744,240	4.00	7.6%	0.0%	36973	50753	350,676	20.1%	26,651	1.5%
Nuwakot	277,471	4.69	20.3%	12.6%	57943	4200	291,191	104.9%	88,354	31.8%
Rasuwa	43,300	4.43	31.6%	33.9%	7040	2410	41,848	96.6%	22,927	52.9%
Dhading	336,067	4.55	18.8%	12.6%	43741	18720	284,236	84.6%	82,517	24.6%
Makawanpur	420,477	4.88	27.9%	4.9%	15012	17042	156,489	37.2%	49,189	11.7%
Gorkha	271,061	4.08	20.4%	20.7%	44650	13430	236,719	87.3%	87,295	32.2%
Total Pop.	5,368,513	4.37	16.4%	8.2%	458,272	177,389	2,817,620	52.5%	864,168	16.1%

Information Sources

Population and Average HH size (Nepal Disaster Risk Reduction Portal, Government of Nepal, 22nd May)

Figures on Population and HH size are taken from the 2011 census data, and thus do not capture population growth. Because of this, there are some instances where there are more reported damaged houses than there were total houses reported in the 2011 census, leading to a population-in-need figure of greater than 100% of the 2011 reported population in some districts.

House Damage (Nepal Disaster Risk Reduction Portal, Government of Nepal, 22nd May)

The GoN provides an incident report on damaged and partially damaged buildings. Public houses in the report are equivalent to residential houses. The label of damaged and partially damaged mean destroyed (will need to be demolished and rebuilt) and damaged (can be repaired but not necessarily habitable) houses respectively.

% Pop. In Poverty (Small Area Estimations of Poverty, Central Bureau of Statistics 2011)

This report, conducted in consultation with the World Bank, uses the Foster-Greer-Thorbecke (FGT) metrics which provide three measures of poverty. The FGT0 metric is used; this metric is simply the proportion of the population below the poverty threshold.

% Pop. No Road Access Access Status, WFP Logistic Cluster, 11th May

The logistics cluster has provided accessibility data from the Nepal Food Security Monitoring Programme (NeKSAP). This data is aggregated by VDC. The VDC data is converted to a district value by weighting it against VDC population.

Analyses have been conducted using 2011 population and household census data. Census values do not account for population growth. There are instances where government figures have reported more damaged households than what is recorded in the census, whereby the government values have been left as is.