

Briefing Note

Shelter and Reconstruction in Post-Earthquake Nepal

Preliminary findings from IRM survey research conducted in April 2017

This note highlights early findings related to shelter and reconstruction from the fourth round of quantitative survey research for The Asia Foundation’s Independent Impacts and Recovery Monitoring Project (IRM). The survey work was implemented by Interdisciplinary Analysts. IRM is a mixed methods and longitudinal study tracking earthquake impacts and recovery over a period of two years (June 2015-April 2017). Previous IRM qualitative and quantitative reports and briefing notes can be found at <http://asiafoundation.org/tag/independent-impacts-and-recovery-monitoring-nepal/>

The IRM surveys generate data from a sample of 4,854 households across 11 earthquake-affected districts. The first round of the survey was conducted in June 2015, the second in February-March 2016, the third in September 2016, with the fourth round implemented in April 2017. Data are weighted to ensure findings are representative. Where possible, the same people are interviewed in each round.

Funds to support IRM are provided by the UK Department for International Development and the Swiss Development Cooperation. The findings and analysis are those of The Asia Foundation and Interdisciplinary Analysts, not of the funders.

Where people are living

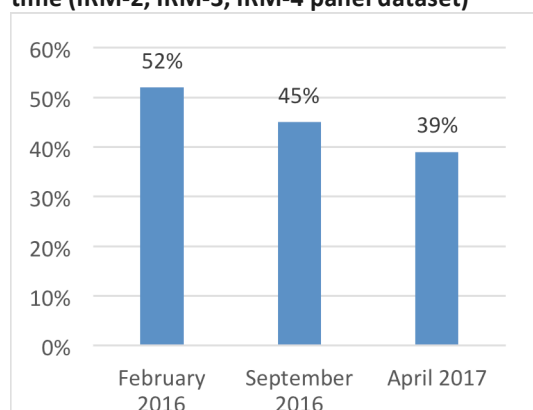
Relatively few people have moved back into their houses.

Two years on from Nepal’s Great Earthquakes, 23% percent of the population in the surveyed districts are still living in self-constructed temporary shelters. In the most affected districts (those categorized as severely hit in the government’s Post-Disaster Needs Assessment), 62% are still in temporary shelters. The figure is highest in Sindhupalchowk district, where 84% remain in shelters (Table 1). IRM qualitative research found that many people in shelters continue to struggle with shelters not suited to hot or cold weather, too small for families to live in, and people suffering from smoke from cooking areas situated in the same areas where they sleep. Seventeen percent of people in shelters said they got sick during the winter due to problems with their accommodation.

Table 1: Proportion living in temporary shelter in April 2017 – by district (IRM-4 full dataset)

District	Proportion in temporary shelter
Sindhupalchowk	84%
Dhading	66%
Nuwakot	63%
Ramechhap	55%
Gorkha	44%
Okhaldhunga	22%
Bhaktapur	13%
Solukhumbu	5%
Kathmandu	3%
Syangja	2%
Lamjung	1%

Figure 1: Proportion living in temporary shelter – over time (IRM-2, IRM-3, IRM-4 panel dataset)



The limited rate of people returning to their own houses can be seen when looking at the panel data that includes responses from individuals who were interviewed in each survey round.¹ In February 2016, nine months after the earthquakes, 52% of people were still living in temporary shelters. By September, this figure had declined to 45%. As of April 2017, 39% were still living in temporary shelter, a 6-point decrease over the past 8 months (Figure 1).

The marginalized are more likely to remain in shelters than others.

People in more remote areas are more likely to remain in shelters than others. In April 2017, 45% of those living in wards that are at least 6 hours from the district headquarters by the fastest means of transport lived in shelters, compared to 37% of those who live 3-6 hours away and just 6% within 3 hours of the district capital.

Those who were marginalized before the earthquakes are far more likely to remain in temporary shelters than others. Those who had a low income, who are illiterate or who have less education, and indigenous Janajati and so-called low caste people are far more likely to remain in shelters than others (Table 2).

Table 2: Proportion in temporary shelter in April 2017 – by population groups (IRM-4)

Identity	Group	Proportion in shelter
Caste	High caste	18%
	Low caste	27%
	Janajati	26%
	Janajati (excluding Newar)	34%
Income level pre-earthquake	NPR 10,000/month or less	44%
	NPR 10,000 – NPR 19,999/month	20%
	NPR 20,000 or more	10%
Education	Illiterate	37%
	Literate but no education	25%
	Primary level	27%
	Lower secondary level	18%
	Secondary level	10%
	SLC pass	9%
	+2/intermediate pass	17%
	Bachelor pass	16%
Marital status (women)	Widow	27%
	Not single woman	23%
	Disabled	38%
Disability	Not disabled	23%

¹ Overall, 4,562 people were interviewed in the last three rounds of IRM.

These differences are a product of differing abilities to recover rather than differing initial impacts from the earthquakes.

Looking only at those whose house was majorly damaged or destroyed by the earthquakes, 54% of those with a low pre-earthquake income remained in shelters in April 2017, compared to 32% of medium income people and 21% of those with a high income. More than half of disabled people whose house was substantially affected by the earthquake continue to live in shelters compared to 37% of those without a disability.

Progress in rebuilding and the NRA reconstruction grant

Two years on from the earthquakes, most people have not started rebuilding. The marginalized are much less likely to have started rebuilding.

Across all districts, 56% of those whose house was significantly damaged or destroyed report that as of April 2017 they had not started to rebuild. The figure is highest for Sindhupalchowk and Dhading (69% each) and is over 50% in every district except for Gorkha (48%) and Syangja, (33%). Solukhumbu stands out as an exception: despite the housing grant not being disbursed at the time of the research, 91% of people whose house was damaged have started rebuilding.

Sixty-one percent of low caste people whose house was majorly damaged or destroyed say they have not started rebuilding, compared to 57% of Janajati and 52% of high caste people. Those with a low pre-earthquake income are 4 percentage points less likely than those with a high income to have started rebuilding and the difference is the same for widows compared to other women. Those whose current monthly income had declined since the earthquake are 14 percentage points more likely to say they have not started rebuilding than those who say their income has improved.

People have not rebuilt because of a lack of money. The housing reconstruction grant has had some impacts in helping people rebuild but these have been minor so far.

Those who have not started rebuilding overwhelmingly say a lack of funds is one of the primary reasons (93%). The second most common reason (49%) was that people were waiting for government reconstruction grants followed by the price of construction materials being too high (32%).²

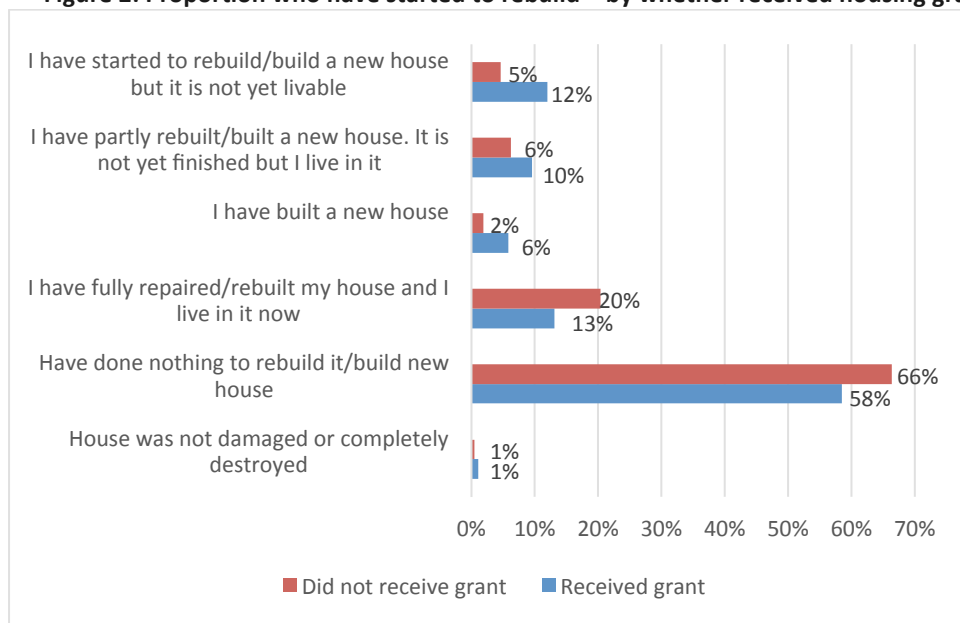
Receiving the first tranche of the housing reconstruction grant has a slight impact in shaping whether people have started to rebuild. A majority of those whose house was damaged or destroyed have done nothing to rebuild, regardless of whether they received the grant or not. Fifty-eight percent of those who received the grant have done nothing compared to 66% of those who have not received the grant (Figure 2). Those who received the grant are slightly more likely to have started to rebuild but are less likely to have fully rebuilt their house.

Most people believe the NPR 300,000 grant will cover less than half of the cost of rebuilding their house.

On average, people believe rebuilding will cost NPR 1,310,854, similar to the NPR 1,396,030 people said it would cost in the IRM-3 survey. Forty-five percent of people who said they have been declared eligible for the grant said it would cover less than 25% of their rebuilding costs while another 35% said it would cover 25-50%. Only six percent said it would cover 75% or more of their costs.

² People could give multiple responses.

Figure 2: Proportion who have started to rebuild – by whether received housing grant (IRM-4)



The largest share of people who have started to rebuild have done so in the past two months. However, this does not appear tied to whether people received the housing grant or not.

Those who have not received the first tranche of the NRA grant were more likely to have started rebuilding in the first six months after the earthquakes, presumably because the level of damage to their house was less making it easier to start to rebuild.³ There was an increase in people who received the grant starting to rebuild after the first tranche was provided: 53% of those who received the grant who had begun rebuilding started after May 2016.⁴ However, this is not substantially different than the figures for those who had not received the grant, with 46% starting after that month (Table 3).

Table 3: When people started rebuilding, of those who have started rebuilding – by whether or not have received first tranche of housing grant (IRM-4 full dataset)

	Received NRA grant	Did not receive NRA grant
After the earthquake, before the first monsoon (April-May 2015)	3%	14%
During the first monsoon after the earthquake (June-August 2015)	11%	21%
After the monsoon, before the first winter (September-November 2015)	15%	13%
During the first winter (December 2015-February 2016)	6%	3%
After the first winter, before the second monsoon (March-May 2016)	11%	4%
During the second monsoon (June-August 2016)	4%	2%
After the second monsoon, before the second winter (September-November 2016)	12%	7%
During the second winter (December 2016-February 2017)	12%	2%
After the second winter (March-April 2017)	25%	35%

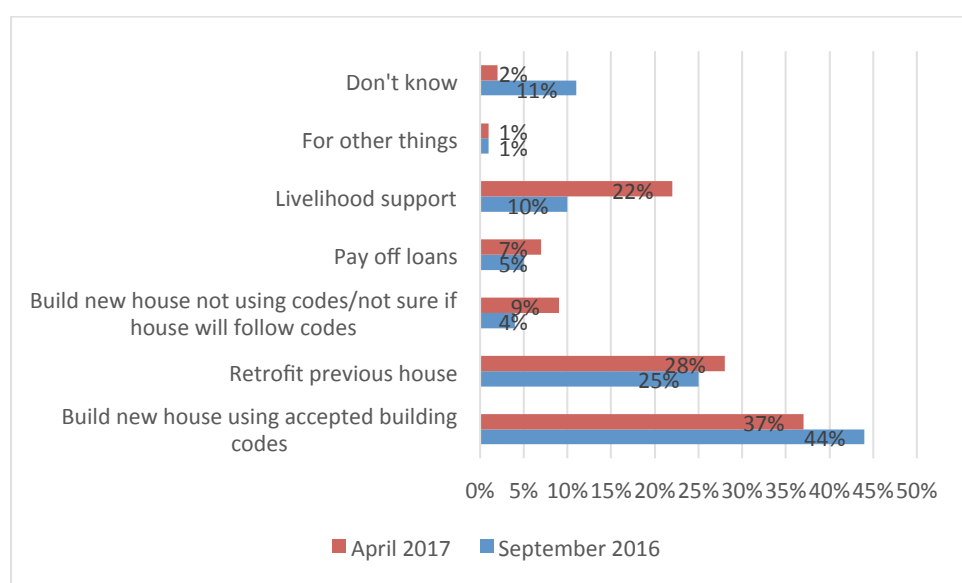
³³ The grant is disbursed in three tranches which total NPR 300,000, with the first tranche valued at NPR 50,000.

⁴ The first tranche of the housing grant started in some districts in May 2016 and was almost fully disbursed in most target districts by March 2017.

Due to other difficulties people face, a majority of people who received the first tranche of the grant have not or do not plan to use it to build houses following the reconstruction program’s guidelines.

For beneficiaries to receive the second and third tranches of the grant, they have to show progress in building and follow set guidelines that ensure their house is earthquake-resistant. Thirty-seven percent of people say they will use the grant to build a structure that follows the accepted building codes (Figure 3). However, this had decreased from the 44% who said they would do so in September of last year. The proportion saying they will either build not following the guidelines, or they do not know whether they will follow the guidelines, has increased to 9%. Almost one-quarter say they will use the first tranche of the grant to support their livelihoods rather than to rebuild and another 7% say they will use the money to pay off loans.

Figure 3: Use of/planned use of first tranche of the reconstruction grant among those declared eligible to receive it – over time (IRM-3, IRM-4 full dataset)



Decisions on how to use the first tranche of the grant are not substantially affected by whether or not people have information on requirements that must be met to receive the second tranche.

Forty-seven percent of people who have received the first tranche of the grant say they do not know the requirements for receiving the second tranche. Women are less likely than men to know the requirements (39% know compared to 54% of men) and only 32% of widows know the conditions. So-called low caste people (40%) are less likely to know than Janajatis (44%) and so-called high caste people (52%).

However, knowledge about the conditions that must be met for the second tranche to be disbursed does not affect greatly how people choose to use the first tranche. Those who do know the conditions are 11 percentage points more likely to say they will build a house following the program’s building codes than those who do not know the conditions (43% versus 32%). However, 21% of those who know the rules still say they will use the first tranche for livelihoods support, 6% to pay off loans, and 12% for other things.

Despite many not following the program rules, most are confident that they will receive the second tranche.

Almost three-quarters of people who received the first tranche of the grant say they are confident they will receive the second tranche, despite 63% saying they will or have used the first tranche for purposes that do not fit with the program rules (Figure 3).

Indeed, levels of confidence are only slightly higher amongst those following the housing reconstruction program guidelines. Seventy-six percent of those who have used or plan to use the first tranche for non-housing related purposes are still confident they will receive the second tranche (Figure 4). This may cause problems if the rules are strictly applied when disbursing the second tranche of the grant.

Figure 3: Confidence in getting second tranche among those who received the first tranche (IRM-4 full dataset)

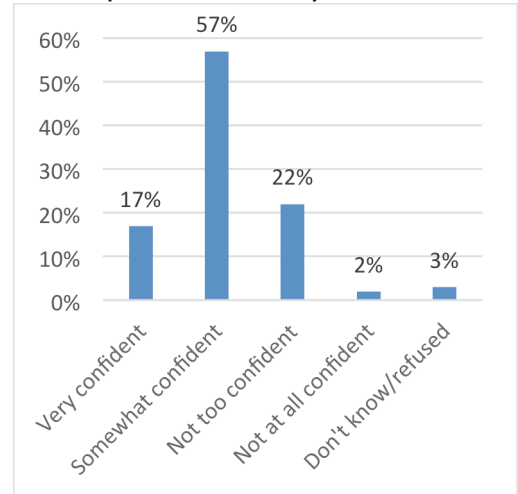


Figure 4: Confidence in getting second tranche of the reconstruction grant among those who receive the first tranche – by use of first tranche (IRM-4 full dataset)

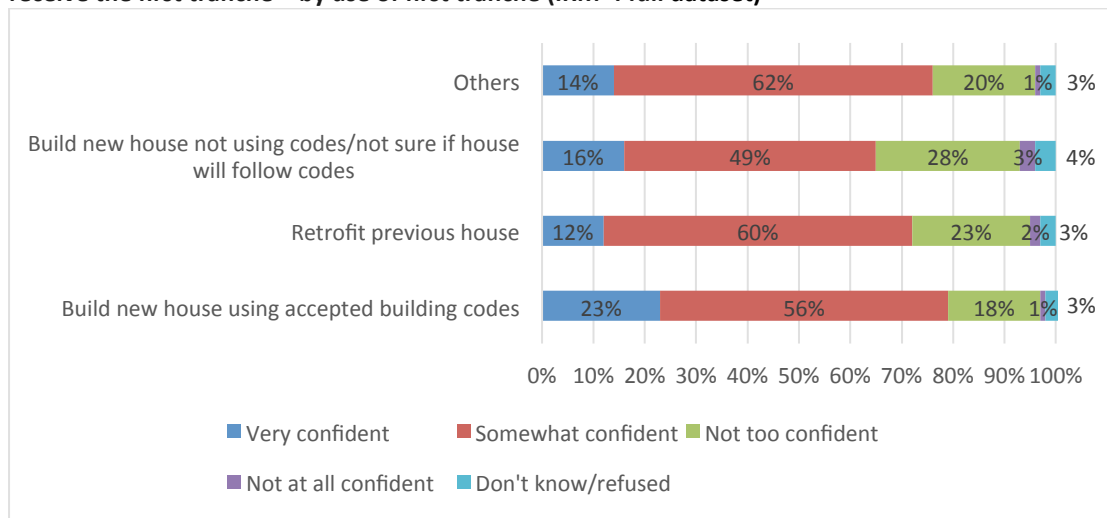
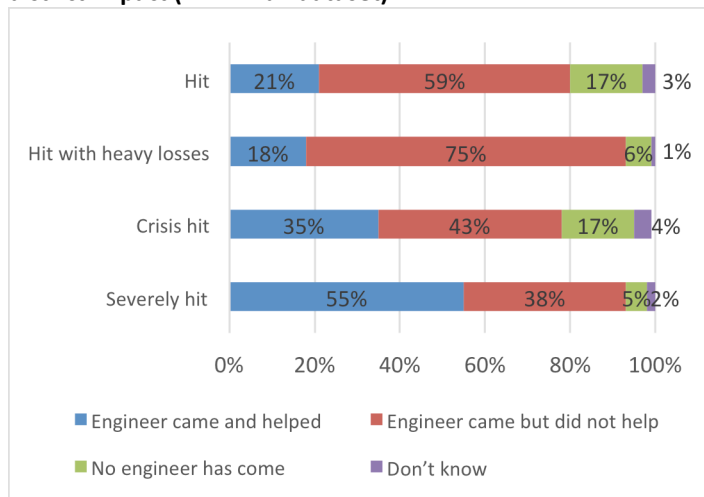


Figure 5: Technical assistance from government engineers – by district impact (IRM-4 full dataset)



Technical assistance from engineers has been uneven.

Among those who have started to rebuild a new house, 59% said they got help from a government engineer, 37% said they had not, and 5% said that no engineer came to their area. Overall, people in more affected districts are more likely to have had an engineer help them (Figure 5).

Knowledge of the government’s retrofitting grant is much lower than that of the reconstruction grant.

Awareness of the NPR 100,000 retrofitting grant is much lower than that of the NPR 300,000 reconstruction grant (only 39% of people were aware of the former compared to 79% of the latter). In Ramechhap, Gorka, Syangja, Bhaktapur, and Okhaldhunga, awareness is particularly low (Table 4). Those in less remote areas are slightly more likely to know about the grant.

Table 4: Do you know about the retrofitting grant? (IRM-4 full dataset)

District	Yes	No/don’t know
Dhading	49%	51%
Gorkha	18%	82%
Nuwakot ⁵	24%	74%
Ramechhap	13%	87%
Sindhupalchowk	35%	65%
Bhaktapur	21%	79%
Kathmandu	49%	51%
Okhaldhunga	21%	79%
Lamjung	25%	75%
Solukhumbu	42%	58%
Syangja	18%	82%
District impact		
Severely hit	29%	71%
Crisis hit	46%	54%
Hit with heavy losses	32%	68%
Hit	18%	82%
Remoteness		
Less remote	43%	57%
More remote	32%	68%
Remote	38%	62%

As with the reconstruction grant, men (45%) and those belonging to so-called higher castes (43%) were more likely than women (33%) and people of other groups (Janajatis 37%, so-called low caste 43%) to know about the retrofitting grant

⁵ Two percent of people in Nuwakot refused to answer the question.