Aid and Recovery in Post-Earthquake Nepal

Independent Impacts and Recovery Monitoring Phase Five
Quantitative Survey: November 2019

The Asia Foundation

UKaid
from the British people

inter disciplinary analysts

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Independent Impacts and Recovery Monitoring Phase Five

Quantitative Survey:: November 2019

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Preface

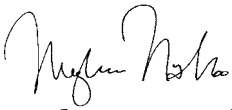
The publishing of this report marks the five-year anniversary of Nepal's devastating 2015 earthquakes and the fifth round of this time-series monitoring research. Notably, this milestone comes amidst the global Covid-19 pandemic . Many of Nepal's most vulnerable communities face disproportionate impacts of the pandemic consistent with those from the earthquakes: increased unemployment, debt, and needs for immediate cash; limited livelihood alternatives, access to health services, and social safety nets; and suffering at the hands of systemic governance challenges.

Since 2015, the Asia Foundation has tracked how those affected by the earthquakes have recovered through five rounds of research to date., using both quantitative and qualitative methods. The initial study highlighted just how destructive the earthquakes had been and the immense challenges that would lie ahead. The subsequent four rounds of research were conducted in the same areas, allowing for a tracking of how recovery has been occurring. This report presents findings from the fifth in the series, completed in late 2019, and highlights some of the longer-term impacts of the earthquakes, as well as observed recovery patterns, including remaining needs and challenges. Specific additional research questions were identified and incorporated through robust consultation with professionals in Nepal who continue to tirelessly tackle the evolving needs and priorities of reconstruction and recovery. In particular, this round included an added focus on urban recovery, vulnerable populations, coping strategies and related longer-term economic impacts.

The findings from this round of data collection show immense progress in housing reconstruction since 2017. People in affected areas have now mostly moved back to their houses and very few remain in temporary shelters. We also see that the types of houses built are not entirely satisfying for many - they are too small to accommodate a household's full spectrum of needs and often used for mixed purposes alongside damaged homes. Longer-term safety of housing has likely improved as most have rebuilt within the grant system and followed the building guidelines. Yet, future planned expansions, and unsupervised repairs may not maintain the compliance ensured under the grants system. The findings also highlight the pronounced differences between urban and rural areas, debt trap trends, and possible longer-term lessons for future disaster responses at the local government level. As in previous rounds, this report highlights the continued slow or stalled reconstruction and recovery progress of those households with low incomes before the earthquakes (e.g., Dalits, the disabled and widows). The earthquakes (and now the pandemic) appear to have exacerbated pre-existing inequalities. More needs to be done to help these vulnerable groups. The reports from the this research round identify remaining challenges and opportunities for ongoing earthquake recovery, as well as future disaster responses.

This research demonstrates the value of long-term social impacts monitoring in affected areas – from documenting local level perspectives and changing conditions on the ground. The lessons identified here are relevant for all stakeholders involved in earthquake recovery and disaster risk reduction and preparedness in Nepal.

We thank our research partners (Democracy Resource Center Nepal and Interdisciplinary Analysts), our donor partner (UK Aid), and Nepali government officials in the National Reconstruction Authority for their support.



Meghan W.T. Nalbo
Country Representative - Nepal
The Asia Foundation

Acknowledgements

Inter Disciplinary Analysts (IDA) and The Asia Foundation would like to thank the many individuals in earthquake-affected districts who took time to participate in the survey, as well as those professionals who have supported and advised the research and participated in consultation workshops to discuss the formation of the questionnaires.

This research was implemented by a team from Inter Disciplinary Analysts, led by Sudhindra Sharma. While Sudhindra Sharma provided overall guidance, Hiranya Baral coordinated the survey fieldwork, Bal Krishna Khadka provided essential support in thinking through the implications of the technical aspects of the survey methodology, Chandra Bahadur KC worked on the detailed sampling design for both the main sample and the booster sample and in getting the dataset in a form ready for analysis, including generating tables and charts. Dinesh Dangol and Sandeep Thapa designed the software for data entry using Open Data Kit.

Preliminary analysis was done by Sudhindra Sharma, Pankaj Pokhrel, Akriti Rana, Bal Krishna Khadka and Chandra Bahadur KC from IDA, who co-authored the report with Jui Shrestha, Lena Michaels and Carolyn O'Donnell from The Asia Foundation-Nepal. A number of people provided useful inputs at various stages. They include Meghan W.T. Nalbo and Srijana Nepal from The Asia Foundation-Nepal, Sabine Loos from Stanford University, and David Lallemant from Nanyang Technological University, Singapore. Kimberly Keeton edited the report.

The IRM research was directed by Lena Michaels in 2019/2020 with support from Meghan W.T. Nalbo, Carolyn O'Donnell, Binayak Basnyat and Srijana Nepal from The Asia Foundation-Nepal. Between 2015 and 2017, the IRM project was directed by Patrick Barron with assistance from Sasiwan Chingchit and Lena Michaels.

The project was funded by UK aid through the UK government. Craig Irwin served as the donor lead. Radha Verma, Craig Irwin, Amanda Duff, Kamala KC and Utsav Shakya have produced useful inputs throughout the project's fifth research round. The views here do not necessarily reflect the UK government's official policies.

Executive Summary

This report provides findings from a large-scale survey conducted in 11 earthquake-affected districts in September and October 2019, four and a half years after two devastating earthquakes hit Nepal in April and May 2015, killing almost 9,000 people and damaging close to one million houses. The report was produced as part of the Independent Impacts and Recovery Monitoring Project (IRM), which began five weeks after the first earthquake in May 2015 and has conducted five research rounds to date. IRM is a longitudinal study that uses both quantitative surveying and in-depth qualitative fieldwork. It is based on revisiting the same affected areas and people at regular intervals to assess current conditions and to gauge how they are changing. This report provides data and analysis from the fifth round of surveying (referred to as IRM-5), conducted in September and October 2019. Throughout the report, IRM-5 findings are compared to findings from previous rounds: IRM-1 (June 2015), IRM-2 (February-March 2016), IRM-3 (September 2016); and IRM-4 (April 2017). This is published in parallel with a report outlining findings from the qualitative research component.[1]

Much has changed in the nearly five years since the earthquakes. In 2015, emergency relief was widely provided, aiming to meet immediate and urgent needs, such as helping people find temporary shelter, addressing food shortages, and ensuring disease did not spread. Later, the volume and form of aid changed, with housing grants disbursed and livelihoods support provided. By late-2019, study findings confirmed much progress in the reconstruction of private houses, public infrastructure, and health facilities, although not everyone had rebuilt by that point. The survey further captured perceptions on several issues, including national outlook and disaster preparedness. Such information can help policy makers, development practitioners, and others better understand the context in which recovery is taking place.

Damages and current housing status

Eight in ten households in earthquake-affected areas reported housing damage. About half said that their house was completely destroyed in the earthquake. On average, it took close to one year for people in earthquake-affected areas to move out of temporary accommodation and back into their home. People in rural areas and in severely hit districts stayed in temporary accommodation longer than those in urban areas or lesser hit districts.

Despite widespread damages, most people had moved back into their own homes by late-2019. Nearly five years after the earthquake, most people whose house sustained some level of damage had moved back into their own house (92%) – an increase of 24 percentage points since the last survey round in 2017 (IRM-4) and of 42 percentage points since 2015 (IRM-1). As people moved back into their own house, the shares living in temporary shelters decreased significantly (from 45% in IRM-1, to 4% in IRM-5). While most people were in their own house, the type of housing they were in varied. Most lived in fully recovered housing—either a fully rebuilt house (47%), a repaired house (22%), or a (second) undamaged house (6%). Yet, 15 percent said they lived in a partially rebuilt house or partially repaired house (12%), or in a damaged unrepaired house (3%). Much smaller shares were in other types of housing, such as temporary shelters, renting, or friends' or neighbors' houses.

1 The Asia Foundation and Democracy Resource Center Nepal (2020). Aid and Recovery in Post-Earthquake Nepal: Independent Impacts and Recovery Monitoring Phase 5 – Qualitative Field Monitoring (November 2019). Kathmandu: The Asia Foundation

Few people were still in temporary shelters in IRM-5 (4% of people with housing damage), but their outlook was pessimistic. Two in three people living in shelters were uncertain about their future. They either wanted to leave but believed they would have to remain in shelters long-term, or they wanted to leave but were unsure of when they would be able to do so.

Reconstruction

There has been considerable progress in housing recovery, with over half of earthquake-affected households (54%) having completed reconstruction and another 26 percent being in the process of conducting reconstruction work. People in more severely impacted districts, those who reported that their house was completely destroyed, and people in rural and more remote areas were more likely to have completed rebuilding/repairing their house. Most people began reconstruction one or two years after the earthquake, and completed it two or three years after the quake. Some 21% had not yet started to rebuild or repair their damaged house. These households tended to be in less affected districts and in less remote and urban areas and reported lower levels of damage. Dalits and Newars were more likely than other caste/ethnic groups to not have started reconstruction work.

Most reconstructed homes had three rooms or fewer. Of those who reported living in a fully rebuilt house, 58% were in one- or two-room houses. Those who built new houses were in smaller houses compared to those who had repaired their old house. People were largely satisfied with their new houses and felt that reconstructed houses were safer than their old houses. Yet, half of those who reported earthquake damage had not demolished their earthquake-damaged house. The main reason for not demolishing a damaged house was that it was still in use. The top two uses for damaged houses were for living/sleeping and for storage. Those who did demolish their house, reported that the earthquake had completely destroyed their house.

The average building costs given by those who completed reconstruction was NPR 1,196,887 (USD 10,069). The cost of materials used was much cheaper if they were locally available, for most items. Costs were lower for more remote households than for less remote and urban households.

Cash and technical assistance were the top forms of assistance received by those who were in the process of, or had completed, reconstruction. Cash was also mentioned as the most useful form of assistance received by those who got assistance. Additionally, those who were in the process or had not started the reconstruction process said that cash would be the most needed form of assistance.

As in IRM-3 and IRM-4, family, friends, and neighbors were overwhelmingly the top sources for information on reconstruction. A majority of respondents felt confident of being able to communicate with NRA officials as well as technical officers/engineers and believed that the experience would be good. People in more remote and rural areas were more likely to hold this view.

Housing reconstruction grants

Nearly everyone who said their house was completely damaged said a team visited, as did majorities of those who said their houses had major or minor damage, satisfaction with the damage assessment increased compared to previous rounds, and official damage assessment matched self-reported damage levels. People who said their houses were destroyed were likely to be eligible for the grant. Nearly everyone who said their house was completely destroyed said they were declared eligible to receive the GoN housing reconstruction grant. Those in severely hit districts, rural areas and more remote areas tended to have been more likely to be declared eligible for the grant, gotten all tranches of the grant and if unsatisfied with how they were classified in the damage assessment, to have filed a grievance. Inability to meet the demands of the grant was the main reason for not getting the grant, despite being eligible for it. About three in ten people declared ineligible for the housing grant filed an official grievance in order to be reconsidered for the beneficiary list, but only eight percent of those who filed a grievance said their grievance was approved and they received the housing grant.

Forty-five percent said they did not know what happened to their grievance. People whose houses were assessed as fully damaged were more likely to file a grievance. The role of local government appeared prominent in the grievance filing process. Two in three among those who filed a grievance said their case was processed by local government and nearly four in ten said that a local government official/representative helped them file the grievance.

The share saying they were 'very satisfied' with the housing damage assessment, those saying they found accessing the grant 'very easy' and those saying they were 'very confident' of receiving all three tranches of the housing grant increased markedly in IRM-5. Even on some of the more substantive questions such as awareness of grant requirements and what share of reconstruction costs will cover, responses were more positive compared to 2017. Awareness of the grant requirements was high, with 85 percent saying they knew what the requirements were.

The housing grant also positively impacted the reconstruction process. Among those who fully rebuilt/repaired their house, 69 percent had gotten all three tranches, 76 percent the second tranche, and 83 percent at least the first tranche. Much of the grant was disbursed in 2017/2018—mostly the second tranche, but also some of the first and third tranches. Difficulties getting the first tranche were primarily related to not having an understanding of the rules or not having documentation, while delays from the bank or local government office were mentioned as a reason for difficulty in accessing the second and third tranches.

Among those declared eligible for the grant, three in four used or planned to use it to build a house following GoN building guidelines. This was a marked change from previous IRM surveys where fewer people mentioned using the grant money to build a house, and more people said they would use it to repair or retrofit their house, or to support their livelihood. In 2019, more people thought the housing grant would cover between 25-50 percent of total costs than they did in previous IRM years. Far fewer said that the grant would cover less than 25 percent of the total costs.

Retrofitting

Around one-fifth (21%) of respondents were aware of the retrofitting grant. Awareness of the NPR 100,000 (USD 854) retrofitting grant was higher in districts that were most impacted by the earthquake, among respondents with partially damaged houses, and in rural areas. The three most commonly cited sources of information for the retrofitting grant were family, friends, and neighbors (which accounted for 81% of those aware of the retrofitting grant), community or community groups (52%), and radio (47%).

Nearly three in ten (28%) respondents with housing damages were interested, or would have been interested, in repairing their houses with the retrofitting grant rather than having to rebuild completely. People in urban areas were twice as likely as those in rural areas to express interest in retrofitting. Residents of Syangja, Kathmandu, and Okhaldhunga were most likely to say they were interested in the retrofitting grant. Most of the 61 percent of respondents who were not interested in retrofitting said their house was too badly damaged to be retrofitted. The second-most commonly cited reason for not being interested in retrofitting was the respondents' preference to stay in a new house rather than repairing an old house.

Out of respondents whose houses had suffered some level of damage (83%, or 4,834 respondents), one-third (33%) reported that they were not declared eligible for the housing reconstruction grant. Among those, eight percent (129 respondents) said they were declared eligible for the retrofitting grant, instead. Overall, this accounts for two percent of the total respondents surveyed in IRM-5. Not all those eligible for the retrofitting grant have received the money. At the time of the survey, 38 percent of eligible households received the first tranche, and five percent received the second tranche. Of the respondents eligible for the retrofitting grant, a little more than four in ten (44%) stated that they had either rebuilt/repaired or plan to rebuild/repair their old houses with the retrofitting grant.

Coping strategies

Borrowing increased over time in the earthquake affected districts. In IRM-1 (June 2015), only 14 percent reported borrowing, whereas in IRM-4 (April 2017), 44 percent reported the same. By IRM-5 (Sept-Oct 2019), 39 percent of respondents said they had borrowed in the past year. Those in severely hit districts and those with higher levels of damage were more likely to have borrowed. The likelihood of borrowing decreased with the rise in income and increased with remoteness. Hill Dalits were the most likely to report borrowing in the last year across caste/ethnic groups by at least 10 percentage points.

At NPR 391,864 (USD 3,335) the average loan amount was highest in IRM-5 and has increased threefold since IRM-1. The average amount has increased mostly due to urban loans in Kathmandu and Bhaktapur. Although people in higher income brackets were less likely to borrow at all, their loan amounts were larger. People who had done nothing toward reconstructing their houses had smaller loans than those who had completed or were in the process of rebuilding their homes.

One-quarter of borrowers mentioned cooperatives as their loan source. Immediately after the earthquake, borrowing from friends and family was common, but in later years, taking loans from cooperatives was most common. Similar shares mentioned borrowing from banks in all years. Interest rates for all loan sources remained steady in the four-year period. In IRM-5, interest rates charged by banks, cooperatives, and other financial institutions ranged from 1.2 to 1.7 percent. Interest rates were slightly higher for informal lending sources; monthly interest rates ranged from 2.2 to 3.8 percent.

For the first time in IRM data collection, the main reason for borrowing was for reconstruction costs, which also explains the increased amounts borrowed. In previous surveys, livelihood support was the main reason for borrowing. Along with progress toward rebuilding, people were taking out higher loan amounts for reconstruction purposes, suggesting that rebuilding has come at the cost of larger debts.

Looking at future borrowing intentions, only 9 percent intended to borrow in the next three months, mostly to provide livelihood support. Those with higher levels of housing damage and people living in severely hit districts were more likely than others to say that they will borrow in the future. Similarly, those with lower- and middle-level incomes were much more likely than people with high incomes to say that they will borrow.

Most said that overall debt stayed the same at the time of survey and before the earthquake. Looking at year-on-year debt level comparisons, although the majority said their debt level stayed the same, those who said it increased grew in IRM-5. After those who said debt stayed the same, more people mentioned debt levels increasing than decreasing, compared to before the earthquake.

Less than 10 percent of respondents mentioned selling assets to deal with the effect of the earthquake in all IRM surveys. Asset sales took place in areas that were most affected by the earthquake. Those with higher levels of earthquake damage and those who said they had completed their reconstruction work were most likely to have sold assets. Land and livestock were the most commonly sold assets, and the share who sold land increased compared to previous surveys. Urban residents were more likely to sell land than rural residents. Compared to previous rounds, people sold less of their land; most said they sold less than 25 percent of the land they owned.

The share of respondents who said remittances were a main income source remained similar across IRM surveys. A similar share of respondents reported having a migrant in the family in all IRM surveys. People with higher incomes tended to say remittances were a major income source and were more likely to have a migrant in the family. In contrast to earlier IRM surveys, households with migrants said that a single adult migrated, compared to surveys right after the earthquake when

entire families had migrated. The main reason for migration remains unchanged: people tended to migrate in search of work. However, in IRM-5, slightly higher shares mentioned education and lack of housing as reasons for migrating. Migration to destinations abroad was more common than to destinations within the country. Most people said that the migrant in their family had moved temporarily.

As with previous survey rounds, most people said that their year-on-year consumption remained more or less the same. Compared to previous survey rounds, a higher share of people said their food consumption had increased over the past year.

Livelihoods

At the time of the earthquake, the majority of households in earthquake-affected areas generated income by farming their own land (59%) or through their own businesses (32%). Farming was cited most frequently as a main income source across all five survey rounds. Yet, over time, there has been a decline in the number of households generating income through farming (by 10 percentage points between 2015 and 2019) and from livestock (by seven percentage points between 2015 and 2019), as well as a simultaneous increase in households earning income from daily wages and from their own businesses. Those whose main household income came from their own business (76%), rent (52%), or daily wage work (43%) were most likely to say their income source was affected by the earthquake. People in government service (6%) and those who got remittances (16%) were the least likely to say so. Around one-third (33%) of those farming their own land said their household livelihood was affected.

Among those households whose source of income was affected by the earthquake, more than half said their house was completely destroyed. This confirms that housing damage has had an impact on income sources. Overall, 84 percent of respondents faced the double burden of having their income affected and having to repair or rebuild their damaged house. Only 16 percent of people with no housing damage said their income source was affected.

Nearly five years after the earthquakes, livelihoods have largely recovered. Some 75 to 88 percent of respondents reported improvements to affected sources of income for all types of income sources. Only five percent said they had to change livelihood since the earthquake, but changes seem inconclusive as most households remained in the same sectors: either agriculture or business.

Incomes seem to have remained stable when comparing income levels in late-2019 to those before the earthquake. Two-thirds of respondents (66%) said their household income has stayed the same as before the earthquake. Twenty-one percent said their income has increased (20% slightly increased, 1% increased a lot) and 14 percent said it decreased (12% slightly decreased, 2% decreased a lot).

Two in 10 respondents (18%) received some type of livelihood assistance after the earthquake. People who received livelihood support overwhelmingly said it was useful (97%), but fewer people (77%) found the livelihood support they received to be helpful specifically for earthquake recovery. Cash grants were the main livelihood support that people wanted now, with 58 percent of respondents mentioning it. A total of 47 percent said they needed some form of agricultural support (training, livestock, seeds, general support, land, or irrigation) while a total of 22 percent said they needed support for their business (business development or training). People with housing damage were comparatively more likely to say they required cash grants as a form of livelihood support than those with no damage at all. People with low incomes were almost twice as likely as those with high incomes to say they needed cash support.

Aid and remaining needs

Nearly five years after the earthquake, nine percent of respondents in earthquake-affected areas had received some form of aid within the past year – a much smaller share than in previous IRM research rounds. Households who reported some level of housing damage were more likely to have received aid than those without damages. Looking at types of aid received, seven percent reported getting cash; fewer people mentioned tents and tarps, food items, blankets and warm clothing – items that were more important during the relief phase. A majority of respondents from IRM-2 through IRM-5 believed that everyone was able to access assistance according to their needs, regardless of their background. The group most commonly seen to receive less assistance or to face difficulties accessing assistance was the so-called 'low caste' group.

The most commonly cited current and future need was cash, followed by employment support. Households with housing damage, and those in rural areas, were more likely to mention the need for cash, employment support, and road access/better roads. They were also much less likely to say they did not need any support than those without damage and those in urban areas. Cash has been the top current and future need since June 2015. However, the need for cash has decreased since IRM-4 (from 69 percent in IRM-4, to 52 percent in IRM-5), likely reflecting progress in the distributions of housing grants.

Public services

Since April 2017 (IRM-4), access to public services – electricity, drinking water, medical facilities, school, and motorable roads – improved according to respondents. Most noticeably, the share with access to drinking water increased from 65 percent in IRM-1, to 91 percent in IRM-5. Respondents' satisfaction with public services also increased. They were most satisfied with electricity (96%), followed by schools (90%), and medical facilities (81%). Satisfaction with drinking water (70%) and motorable roads (72%) was comparatively lower.

Security, trust and social cohesion

The majority of respondents said that they felt safe (96%) in their community, while four percent said they felt unsafe. Respondents in rural areas were more likely to state that they feel safe. Eight percent reported violent incidents in their community in the past year – a small share, but a noticeable increase compared to previous rounds. Respondents residing in urban areas, particularly in the district of Kathmandu, were more likely to say that a violent incident had occurred in the community.

The most trusted institutions were the media (92%), Community Based Organizations (CBOs) (85%), and the Nepal Army (83%). The most trusted individuals among political and elected leaders were ward chairpersons (70%). Almost three-fourths of respondents (72%) said they trusted the people they know, one-third (32%) reported trusting people from a different area, a little over half (51%) said they trust people from a different caste, and slightly less than half (48%) said they trust people belonging to a different religion. Residents of rural areas were generally more likely to trust people than those residing in urban areas. Compared to previous survey rounds, IRM-3 (September 2016) and IRM-4 (April 2017), a smaller number of people said that their relations with neighbors had improved or become better since the earthquake. Most respondents (85%) reported that their relations with neighbors had remained the same since the earthquake. Residents of rural areas were more likely than those in urban areas to report that relations with neighbors had improved.

Since IRM-4 (April 2017), similar shares of respondents reported that they would be very likely or likely to conserve food or water in the community in case of an emergency when requested by public officials (87% in IRM-5). The share of respondents who were either very unlikely or unlikely to cooperate to save food and water in an emergency was relatively higher in crisis-hit and in urban areas, especially in Kathmandu.

Illness and psychological effects

Nine percent of respondents reported that their family members had fallen sick during the 2019 monsoon due to problems with their shelter – although most of those reporting illness were now living in their new house. The most common illness was fever or flu. In IRM-5 (Sept-Oct 2019), six percent of respondents reported that someone in their family was still suffering from psychological effects of the earthquake – a lower share than in previous years. Respondents who said that their houses were damaged by the earthquake were more likely than those with lesser or no damage to say they had a family member who still suffered psychological effects from the earthquake. Extreme fear was the most common psychological effect, followed by nervousness. While those residing in urban areas were more likely to say their family member had fallen ill due to problems with housing/ shelter conditions, those residing in rural areas were more inclined to say that someone in their family was suffering psychological effects from the earthquake.

Disaster preparedness

Six in ten say they feel prepared for future natural disasters, about one-third say they do not feel prepared[1]. Respondents in the low income bracket, with no formal education, residing in severely hit districts, and in rural areas were comparatively more likely to feel prepared if a disaster struck again in their community. Building houses on safe land and constructing earthquake-resilient houses, based on government guidelines, were the main factors influencing whether or not people feel prepared for future disasters. These are also the top two recommendations people in earthquake-affected areas give to people elsewhere in the country and to the government for future preparedness. However, while these individual measures were cited most frequently, many also said government measurements, such as prevention, information-sharing, and forming rescue and relief teams, were also important.

Perceptions of the reconstruction process

When assessing the reconstruction process, people were most positive about the ability to reconstruct houses according to building standards for earthquake-resilient houses: Around one in three said they found this aspect to be most positive about earthquake reconstruction. A similar share said they found nothing positive about the reconstruction process. More than twice as many people in urban areas said there was nothing positive about the reconstruction process, pointing to the list of challenges they faced with reconstruction in urban areas, where progress has been slower.

Future outlook of the country

Slightly more than half (52%) of people in earthquake-affected districts said things in Nepal are moving in the right direction, but four in ten (43%) believe the country is moving in the wrong direction. People in the urban districts of Kathmandu and Bhaktapur were more negative about the direction of the country than those in the other districts. People had a more optimistic outlook about their own locality than the nation. Nearly seven in ten (69%) said conditions in the place they live and work in are improving, and three in ten (28%) said things are getting worse. Similar patterns emerged across demographic groups when comparing results for their outlook on the nation and their own locality. Optimism was highest among the youngest group, and declined with increases in income and education. People in rural areas were optimistic, while those in urban areas were pessimistic.

List of Acronyms

BCM	Brick and Cement Mortar
CBS	Central Bureau of Statistics
CDO	Chief District Officer
CGA	Cash Grant Agreements
CGI	Corrugated Galvanized Iron
CLPIU	Central Level Project Implementation Unit
DFID	UK Department for International Development
DLPIU	District Level Project Implementation Unit
DRCN	Democracy Resource Center Nepal
DUDBC	Department of Urban Development and Building Construction
GMALI	Grant Management and Local Infrastructure
GoN	Government of Nepal
HRRP	Housing Recovery and Reconstruction Platform
INGO	International non-governmental organization
IRM	Independent Impacts and Recovery Monitoring project
JICA	Japan International Cooperation Agency
MoFAGA	Ministry of Federal Affairs and General Administration
MoUD	Ministry of Urban Development
NGO	Non-governmental organization
NPR	Nepali Rupees
NRA	National Reconstruction Authority
PDNA	Post-Disaster Needs Assessment
PDRF	Post Disaster Recovery Framework
PPS	Probability Proportional to Size
RCC	Reinforced Cement and Concrete
RHRP	Rural Housing Reconstruction Program
SDC	Swiss Agency for Development and Cooperation
SMM	Stone and Mud Mortar
UK	United Kingdom
USD	United States Dollar
VDC	Village Development Committee

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Chapter 1
Introduction

Photo: Dewan Rai (Okhaldhunga)

1.1 Background

This report provides findings from a large-scale survey conducted in 11 earthquake-affected districts in September and October 2019, four and a half years after two devastating earthquakes hit Nepal in April and May 2015, killing almost 9000 people and damaging houses close to one million homes. The report was produced as part of the Independent Impacts and Recovery Monitoring Project (IRM), which began five weeks after the first earthquake in May 2015 and has conducted five research rounds to date. IRM involves revisiting affected areas and people at regular intervals to assess current conditions and to gauge how they are changing. Since data collection and research is conducted in the same areas in each round, with many of the same people interviewed, IRM allows for an assessment of how conditions and needs are changing over time and of the roles that aid and assistance are playing— both positive and negative—in shaping recovery and reconstruction patterns.

IRM is a longitudinal study that uses both quantitative surveying and in-depth qualitative fieldwork. This report provides quantitative findings from the fifth round of surveying (referred to as IRM-5). It is published in parallel with a report outlining findings from the qualitative research component.[1] The report primarily provides data and analysis on the situation as of September and October 2019. It compares data collected in September and October 2019 with that gathered in the four previous rounds: IRM-1, conducted in June 2015; IRM-2, conducted in February-March 2016; IRM-3 conducted in September 2016; and IRM-4 conducted in April 2017.

Much has changed in the nearly five years since the earthquakes. In 2015, emergency relief was widely provided, aiming to meet immediate and urgent needs, such as helping people find temporary shelter, addressing food shortages, and ensuring disease did not spread. Later, the volume and form of aid changed, with housing grants disbursed and livelihoods support provided. By late-2019,

1 The Asia Foundation and Democracy Resource Center Nepal (2020). Aid and Recovery in Post-Earthquake Nepal: Independent Impacts and Recovery Monitoring Phase 5 – Qualitative Field Monitoring (November 2019). Kathmandu: The Asia Foundation

study findings confirmed much progress in the reconstruction of private houses, public infrastructure, and health facilities, although not everyone had rebuilt by that point.

This survey report documents the nature of the changing needs and the degree to which people—of different demographic groups, suffering from different degrees of impact from the earthquakes, living in different areas—are recovering. It looks at a range of issues, including where people are living, the extent to which they are rebuilding, how their livelihoods are recovering, how reconstruction is addressing the challenges people face in building earthquake-resistant houses, and the coping strategies people are using. It also looks at secondary earthquake impacts on, as well as broader changes to, social relations, health and psychological wellbeing, politics, access to services, and trust institutions. The survey further captured perceptions on several issues, including national outlook and disaster preparedness. Such information can help policy-makers, development practitioners, and others better understand the context in which recovery is taking place.

Focus areas

The report focuses on a number of areas, both in terms of the current situation as well as changes since the earthquakes. The focus areas are as follows:

- Housing damage and condition – damage caused by the earthquakes, and where and how people lived at the time of the survey (Chapter 2);
- Reconstruction – progress in reconstruction, conditions, and uses of newly built and repaired houses, reconstruction costs and materials, reconstruction assistance received, and access to information on reconstruction (Chapter 3);
- Assessments and housing reconstruction grants – how people's houses were assessed, their satisfaction with the assessment, access to and use of housing reconstruction grants, and the status of grievances (Chapter 4);
- Retrofitting - people's awareness of and interest in retrofitting, and access to retrofitting grants (Chapter 5);
- Coping strategies –coping mechanisms people have been using (including borrowing, access to credit, sale of assets, and changes in remittances) (Chapter 6);
- Livelihoods – impacts on incomes and livelihoods, and the nature of livelihoods assistance (Chapter 7);
- Access to aid, current and anticipated needs, and access to services – changes to levels of aid and access to services since the earthquakes, fairness of aid distribution, and needs of earthquake-affected people (Chapter 8);
- Security and well-being – perceptions of safety, social cohesion, and trust in institutions, how living conditions affected health in the past year, psychological effects from the earthquakes, other changes (Chapter 9); and
- Future outlook in earthquake-affected areas - general perception of the country's overall direction, perceptions of disaster preparedness, and views on lessons learned from the earthquakes (Chapter 10).

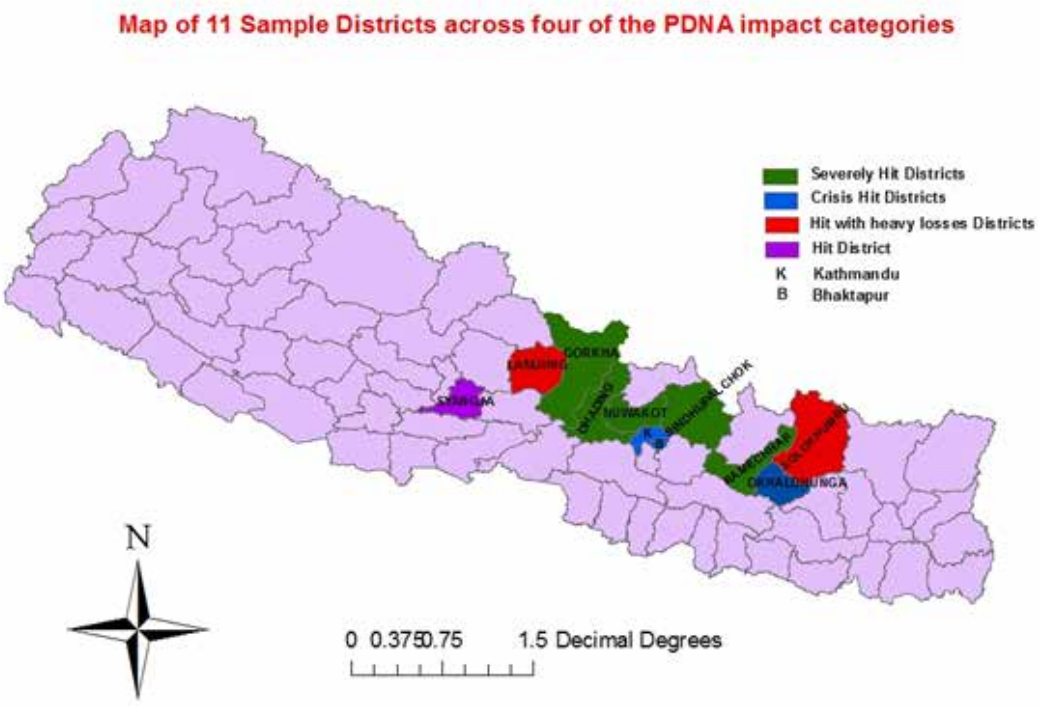
Annexes provide more details on the methodology employed. The analysis contained in this report is that of the authors, rather than the funders of IRM.

1.2 Methodology and approach

Sample

The IRM-5 survey involved face-to-face interviews with 5,857 respondents. The households for IRM-5 were selected from the same 11 districts as previous rounds of IRM surveys.[2] To the extent possible, the same respondents who were interviewed in previous rounds were also interviewed in IRM-5. About 73 percent of respondents (3,554 respondents) were retained between IRM-2 and IRM-5[3]; the remaining households sampled in IRM-5 (about 2,303 households) were from the same area, but were new respondents to the survey. Respondents were selected from 345 wards in the 11 districts using probability proportional to size (PPS) sampling.

Map 1.1 Districts surveyed



In the IRM-5 survey, an additional sample of 1,000 respondents were allocated as a booster[4] sample to allow for an added focus on two issues: urban recovery and retrofitting. This additional sample was added in two rural municipalities (Champadevi Rural Municipality of Okhaldhunga district, and Jwalamukhi Rural Municipality of Dhading district) and two urban municipalities (Kathmandu Metropolitan of Kathmandu district, and Bhaktapur Municipality of Bhaktapur district).

2 The IRM-1 survey was conducted in 14 districts. Three of these districts – Manang, Khotang, and Dang – were dropped in subsequent survey rounds as they had not been included in the PDNA's list of affected districts. IRM-1 was conducted before the government released the PDNA, and selection of districts for IRM-1 was made from the 26 districts initially deemed affected by the government.

3 See Annex A for an overview of attrition rates.

4 While designing the sample, the main sample has been further supplemented by booster samples in certain rural/urban municipalities of Kathmandu, Bhaktapur, Dhading, and Okhaldhunga. Although the sampling design for the booster sample is purposive in nature in that the list had been provided to The Asia Foundation and IDA, the processes of selecting the households and respondents below the cluster are based on probability. Thus, below the clusters, the sampling procedures for the main sample and the booster sample has been the same. For the booster sample, The Asia Foundation provided IDA the list of sample clusters of the concerned Palikas in Okhaldhunga and Dhading where the retrofitting activities are very likely to take place. Similarly, the clusters of Kathmandu and Bhaktapur districts where a large number of households were damaged by the earthquake have also been added as the booster.

A full discussion of the methodology is included in Annex A. However, two aspects of the approach are especially important.

Representative data

The data are representative of all people in the 11 districts studied. A careful sampling strategy—at the erstwhile Village Development Committee (VDC), ward, tole/settlement, household and individual levels— was employed. Respondents were selected using PPS sampling using weights. The margin of error at the aggregate level is +/- 1.3% at a 95 percent confidence level. Therefore, estimates in this report contain a high degree of confidence that likely hold true for the wider population living in earthquake-affected districts. In most cases, when making comparisons across the four surveys, results are based on full surveys in 11 districts. The large sample size allows for more accurate estimates, and the margins of error are smaller compared to most surveys, in Nepal and beyond. The larger samples from urban areas further represent those living in urban areas with a similar level of confidence, such that differences between people residing in urban and rural areas can be interpreted as representative of both urban and rural dwellers.

Tracking changes over time

Starting from IRM-2 (February-March 2016), IRM was set up as a panel survey – where possible, the same people were interviewed in each round (referred to as the household panel dataset). Since many of the survey respondents were the same people, changes in survey answers tended to relate to changes on the ground, rather than to changes in the make-up of the sample. Attrition, instances when respondents from earlier survey dropped out due to various reasons in a subsequent survey, also occurred. The attrition rate from IRM-2 to IRM-5 (which covers a period of 3 years between September 2016 and September-October 2019) was about 27 percent.

The sample sizes for IRM-1, IRM-2, IRM-3, and IRM-4 were 2,380, 4,853, and 4,855, and 4,854, respectively. As much as possible, the same households surveyed in previous IRM surveys were identified for interviews in IRM-5 (about 86% of IRM-4 respondents were interviewed in IRM-5).[5] The remaining households in each enumeration area who had not been interviewed earlier were selected using the same protocols as in earlier survey rounds. Wherever possible, the same respondents who were surveyed in IRM-4 were selected for IRM-5. Previous survey rounds obtained the names and mobile phone numbers of interviewees. This was used to identify the respondent in the household to be interviewed for subsequent surveys.

Analysis

The survey data are used in a number of ways throughout this report.

First, for many analyses, the full data of IRM-1 to IRM-5 were compared at the aggregate level, allowing for an assessment of changes over time. The IRM-5 survey was deliberately designed to mirror previous IRM instruments, with many of the questions remaining the same. This allowed for direct assessments to be made of changes over time. Some adjustments were made between each survey to capture particularly important events, such as the fuel crisis, cash grant distribution, and, in this round, the status of retrofitting. The first survey tracked attitudes, perceptions, and experiences two months after the disaster and changes since the earthquakes. Most of the IRM-2 questions

5 See Annex A for an overview of attrition rates.

recorded information on what had happened between then and February 2016 when the second survey was conducted, with the beginning of the 2015 monsoon period (June 2015) used as the time marker. The IRM-3 survey, conducted towards the end of the monsoon, recorded changes since IRM-2 at a time when the third official damage assessment was being, or had recently been, conducted. The IRM-4 survey was conducted during April 2017 when the housing reconstruction grant was increased from NPR 200,000 (USD 1,700) to NPR 300,000 (USD 2,550), the government announced the provision of a NPR 100,000 (USD 850) retrofitting grant for those whose houses were categorized as partially damaged, and two weeks before the first polling of the first local elections in 20 years. Since IRM-4 was conducted in April 2017, local and provincial elections had successfully been completed, local and provincial level representatives have been elected, and the country was transitioning to a federal system.

As many people who were interviewed in IRM-5 were also interviewed in past rounds, the survey was able to assess with more rigor how individuals' perceptions and experiences had changed over time. Some assessments included only those interviewed in all four rounds, or in the past two or three rounds (the household panel datasets). Since most respondents were interviewed in IRM-2 to IRM-5, with fewer also interviewed in IRM-1, the study made more use of the IRM-2 to IRM-5 dataset, except where it was particularly important to examine changes across all five rounds. Many of the analyses and data breakdowns compare aggregate responses from each of the Post-Disaster Needs Assessment (PDNA) district impact categories: severely hit districts; crisis hit districts; hit with heavy losses districts; and hit districts (margin of error 1.8 to 5.2%). These analyses provide a broad picture of the differences (and similarities) between districts with varying degrees of earthquake impact.

Table 1.1: Districts surveyed (IRM-5)

Severely hit		Crisis hit		Hit with heavy losses		Hit	
District	Sample size, and margin of error (%)	District	Sample size, and margin of error (%)	District	Sample size and margin of error	District	Sample size, and margin of error (%)
Ramechhap	600 (+/-4%)	Kathmandu	502 (+/-4.4%)	Solukhumbu	350 (+/-5.2%)	Syangja	351 (+/-5.2%)
Gorkha	600 (+/-4%)	Bhaktapur	612 (+/-3.9%)	Lamjung	351 (+/-5.2%)		
Sindhupalchowk	602 (+/-4%)	Okhaldhunga	858 (+/-3.3%)				
Nuwakot	350 (+/-5.2%)						
Dhading	681 (+/-3.8%)						

Most of the analyses were also broken down by individual districts (margin of error 3.3 to 5.2%). Each district had experienced the earthquakes, and the subsequent aid response, differently. These granular analyses allow for an exploration of how districts vary, say, in aid received, in coping strategies employed, and in attitudes towards local leaders. This level of disaggregation means that, at times, the report provides a detailed analysis of the situation in specific districts. Such analyses will be most useful for those working in particular districts.

Analysis of the data were broken down by a host of demographic and geographic variables. Different groups of the population (men/women; people of different caste; people with different incomes; etc.) will likely have experienced the earthquakes in different ways. Disaggregating analyses by all demographic variables allows for a much finer assessment of differing patterns of impacts and recovery. The analyses provide information on which groups of people are more vulnerable and may require particular attention.

Variables

Most of the variables used in the analyses in this report are self-explanatory. The following are descriptions for those variables which may be less clear.

- Caste/ethnicity: A total of eight nominal measures of caste are included in the study: Hill castes, Hill ethnic groups, Hill Dalits, Newar, Madhesi castes, Madhesi ethnic groups, Madhesi Dalit, and Muslim. Hill castes include Hill Chettris, Brahmins, Thakuris and Sanyasis. Hill ethnic group refers to indigenous communities residing in the hills like Gurung, Magar, Tamang, Rai, Limbu, Sherpa, Sunuwar, etc. Some communities that make the Hill Dalit category are Kami, Sarki, Damai, Badi, etc. Newar includes all the sub-castes/groups within the Newar ethnic group category. Findings are primarily presented for Hill castes, Hill ethnic groups, Hill Dalits, and Newars for which the sample sizes are high enough for separate analyses. Sample sizes for other groups were very small.

- Income: Respondents in this study are categorized into three levels of self-reported income estimates: low-income, medium-income and high-income. The monthly income of those in the low-income group is up to NPR 9,999 (USD 84.92); the monthly income of those in the medium-income group ranges from NPR 10,000 (USD 84.93) to NPR 19,999 (USD 169.86); the monthly income of those in the high-income group is above NPR 20,000 (USD 169.87). In most cases, analyses are based on self-reported pre-earthquake income, but in some cases, the report looks at differences in outcomes by current income, using the same categories.

- Disability: Respondents were asked six questions on disability, drawing on guidance from the Washington Group on Disability Statistics. Where respondents said they have a lot of difficulty or cannot do any one or more of the following, they were coded as having a disability (If they mentioned having no or some difficulty, then they were coded as not having a disability.): 1. seeing, even if wearing glasses; 2. Hearing, even if using a hearing aid; 3. Walking or climbing steps; 4. Remembering or concentrating; 5. Self-care such as washing or dressing; and 6. Difficulty communicating.

- Remoteness: Remoteness has three categories based on how far the ward is from the district headquarters. If the ward is less than one hour from the district headquarters, using the quickest means of transportation, then it is coded as “less remote.” If the ward is 1-6 hours from the district headquarters, it is coded as “remote”. Finally, if the ward is located more than 6 hours from the district headquarters, it is coded as “more remote.”

- Urban/rural: Analysis of the urban/rural variable was based on the old local level structure of Village Development Committees (VDC) and municipalities. As per the old government structure, there were 3,157 VDCs and 217 municipalities. The areas classified under VDCs have been referred to as rural areas, and the areas classified under municipalities have been referred to as urban areas. Despite local body restructuring in 2017, when the previous VDCs and municipalities were restructured in rural and urban municipalities, the previous categorization was maintained, as it more accurately represents the difference between urban and rural areas. (For example, under the new demarcations, the larger urban municipalities also include surrounding rural areas and therefore, do not adequately represent findings specific to urban recovery.)

Limitations

The survey data presented here are a result of a careful and methodical sampling design. The results are representative of the full population of the 11 surveyed districts. The survey was piloted to ensure that respondents understood questions, and adjustments were made where necessary. Lessons from the effectiveness of the questions in previous surveys also helped to improve the IRM-5 tools. The large sample size selected through PPS sampling leads to a smaller margin of error, which means that estimates presented in the report are fairly accurate, with a strong degree of confidence that the findings are true to reality.

However, as with all surveys, caution should be taken when interpreting findings. The error margin and confidence level must be taken into account when interpreting findings. This is especially true for district-level findings, which are based on higher error margins. The booster samples from urban areas were useful when examining differences between rural and urban living conditions; however, there are times when the urban population skews the overall results, and should be accounted for carefully examining the distinction between urban and rural settings. For example, the inclusion of the two urban districts of Bhaktapur and Kathmandu in the 'crisis hit' district impact category often skewed findings for 'crisis hit' districts.

Surveys provide useful information on the situation of a large number of people, selected such that findings can be generalized across the broader population in affected areas. However, bivariate results presented in this study do not sufficiently explain the underlying factors that determine different situations and attitudes – for example, why people feel safe or have not received aid.

Information provided throughout the report is based on self-reported accounts. Results related to factual events may not have been captured well by the survey. For instance, many respondents may not have had full knowledge of the situation (e.g. who provided aid or whether an official assessment team had visited their wards). With regards to reporting the amount required for reconstruction and repairing, the respondents might not be able to recall the exact amount they incurred to purchase materials. Some respondents may also have incentives to over- or under-report the level of impact they experienced, whether or not they received aid, and so on. While results still tend to represent the general perception among the population, it is important to bear in mind that these are self-reported accounts.

Finally, some questions, such as whether violence had occurred, are sensitive and some respondents may prefer not to answer them or to under-report them.

Photo: Prabhat R Jha (Suryabinayak, Bhaktapur)

Chapter 2
Housing Status

Photo: Manasi Prasai (Gorkha)

This chapter presents findings on housing damages and the time people have spent in temporary accommodation before moving back into permanent housing. The chapter also discusses the housing status of people in earthquake-affected areas at the time of research, highlighting the movement from shelters into repaired or rebuilt houses over time, and the type of housing people were in. Finally, the chapter looks at the small share of people still in temporary shelters nearly five years after the earthquake and their outlook on leaving the shelter for better housing.

Key Findings

Damage and time spent in temporary accommodation

- Eight in ten households in earthquake-affected areas reported housing damage. About half said that their house was completely destroyed in the earthquake.
- On average, it took close to one year for people in earthquake-affected areas to move out of temporary accommodation and back into their home. People in rural areas and in severely hit districts stayed in temporary accommodation longer than those in urban areas or lesser hit districts. Nearly all respondents stayed in a self-constructed shelter before moving back to their own home.

Current housing

- Nearly five years after the earthquake, most people whose housesustained some level of damage had moved back into their own house (92%) – an increase of 24 percentage points since the last survey round in 2017 (IRM-4) and of 42 percentage points since 2015 (IRM-1). As people moved back into their own house, the shares living in temporary shelters decreased significantly (from 45% in IRM-1, to 4% in IRM-5).

- While most people were in their own house, the type of housing they were in varied. Most lived in fully recovered housing—either a fully rebuilt house (47%), a repaired house (22%), or a (second) undamaged house (6%). Yet, 15 percent said they lived in a partially rebuilt house or partially repaired house (12%), or in a damaged unrepaired house (3%). Much smaller shares were in other types of housing, such as temporary shelters, renting, or friends' or neighbors' houses.

Temporary shelters

- Few people were still in temporary shelters in IRM-5 (4% of people with housing damage), but their outlook was pessimistic. Two in three people living in shelters were uncertain about their future. They either wanted to leave but believed they would have to remain in shelters long-term, or they wanted to leave but were unsure of when they would be able to do so.

2.1 Housing damage

The IRM surveys asked respondents how their house was officially classified in the Government of Nepal (GoN)'s damage assessment ('official damage assessment') as well as how they, themselves, assessed their housing damage ('reported housing damage') (Table 2.1). Findings on official housing damage are discussed in Chapter 4.1. This chapter looks at self-reported earthquake damage, which provides a point of comparison over time of all respondents, and not just subset of the respondents whose houses were assessed.

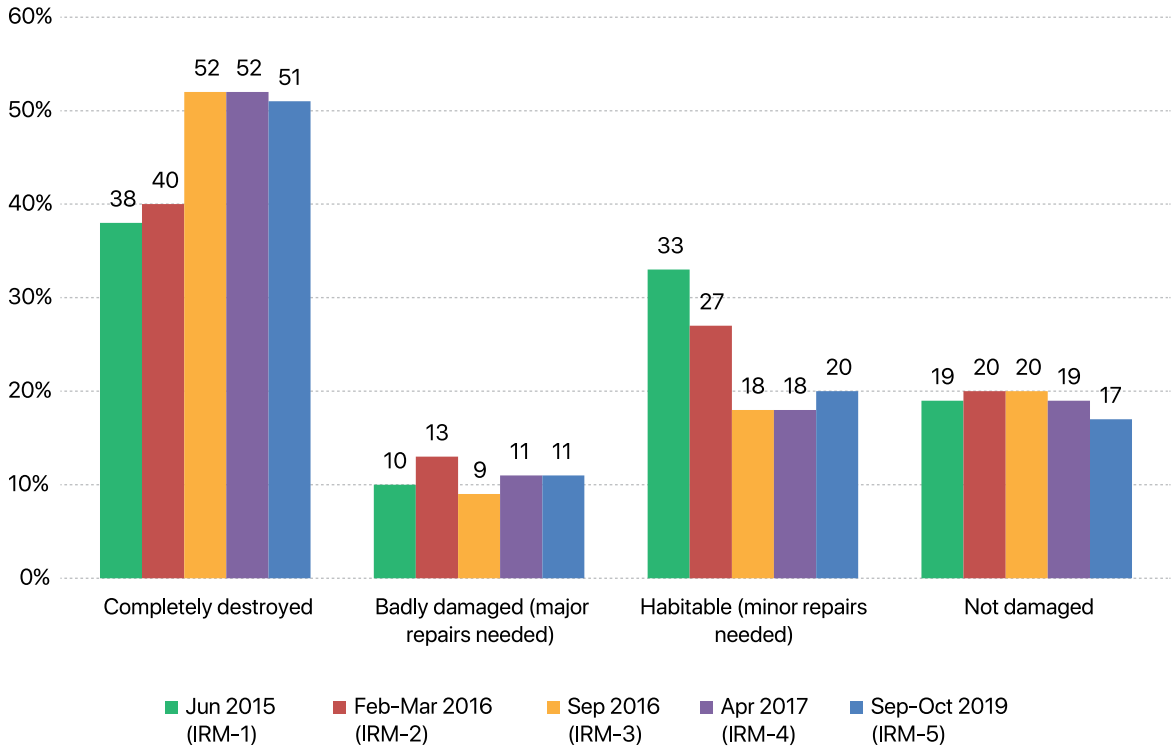
Table 2.1: IRM housing damage categories – reported damage vs. official damage assessment[1]

Reported housing damage	Official damage assessment
Completely destroyed	Fully damaged
Badly damaged (major repairs needed)	Partially damaged
Habitable (minor repairs needed)	Not damaged
Not damaged	

In each round of the IRM survey, respondents in the 11 earthquake-affected districts surveyed were asked to self-assess the level of damage to their house caused by the earthquake. Half of surveyed households in the three most recent survey rounds (IRM-3, IRM-4, and IRM-5) said their house was completely destroyed in the earthquake. The share who reported complete destruction of their house increased ten points between IRM-2 (Feb/Mar 2016) and IRM-3 (Sep 2016). In the same time span, the share who said their house was habitable but needed minor repairs decreased (Figure 2.1). One explanation could be that, with various assessments being done in 2016, respondents' views on damage solidified around this time.

1 The damage grades of 'fully damage', 'partially damaged' and 'not damaged' do not correspond to damage categorization employed by the CBS teams during the assessment. This survey uses these categorizations which were used by earlier rapid damage assessments (which used them with corresponding red, yellow and green labels) as people have widely continued using them when explaining how their house was assessed. Very few people were aware of official damage grades and verifying this would have involved checking their housing grant documents. Yet, people were generally aware whether their house was declared 'fully damaged' (eligible for the NPR 300,000 housing reconstruction grant), 'partially damaged' (eligible for the NPR 100,000 retrofitting grant), or 'not damaged' (not eligible for any support).

Figure 2.1: Self-reported housing damage (IRM-1 base= 2,980, IRM-2 base=4,850, IRM-3 base=4855, IRM-4 base=4,854, IRM-5 base=5,857, weighted)



Levels of self-reported damage corresponded with the district impact categories outlined in the GoN Post-Disaster Needs Assessment.[2] More than eight in 10 residents of 'severely hit' districts (the most severely impacted districts) said their house was completely destroyed by the earthquake, whereas fewer people in 'crisis hit,' 'hit with heavy losses,' or 'hit' districts said the same (Table 2.2). Those in rural areas (65%) were far more likely than those in urban areas (26%) to say that their house was completely destroyed.

2 Affected districts were categorized into five categories based on number of houses destroyed or damaged: 'Severely hit', 'crisis hit', 'hit with heavy losses', 'hit' and 'slightly affected': https://www.npc.gov.np/images/category/PDNA_volume_BFinalVersion.pdf (p.XI)

Table 2.2: Reported housing damage – by district, district impact, urban/rural (IRM-5, base=5,857, weighted)

		Completely destroyed	Badly damaged (major repairs needed)	Habitable (minor repairs needed)	Not damaged
		%	%	%	%
Overall		***51***	***11***	***20***	***17***
District impact and district	**Severely hit**	**89**	**6**	**4**	**1**
	Dhading	85	9	5	0
	Gorkha	85	7	6	3
	Nuwakot	97	1	3	0
	Ramechhap	83	10	6	1
	Sindhupalchowk	94	4	2	0
	Crisis hit	**36**	**12**	**25**	**28**
	Bhaktapur	51	12	15	23
	Kathmandu	31	11	27	30
	Okhaldhunga	71	12	16	2
	Hit with heavy losses	**36**	**21**	**22**	**21**
	Lamjung	22	21	28	29
	Solukhumbu	59	23	9	8
	Hit	**14**	**13**	**60**	**12**
	Syangja	14	13	60	12
Rural/urban	Rural	65	9	17	9
	Urban	26	13	28	33

2.2 Time spent in temporary housing

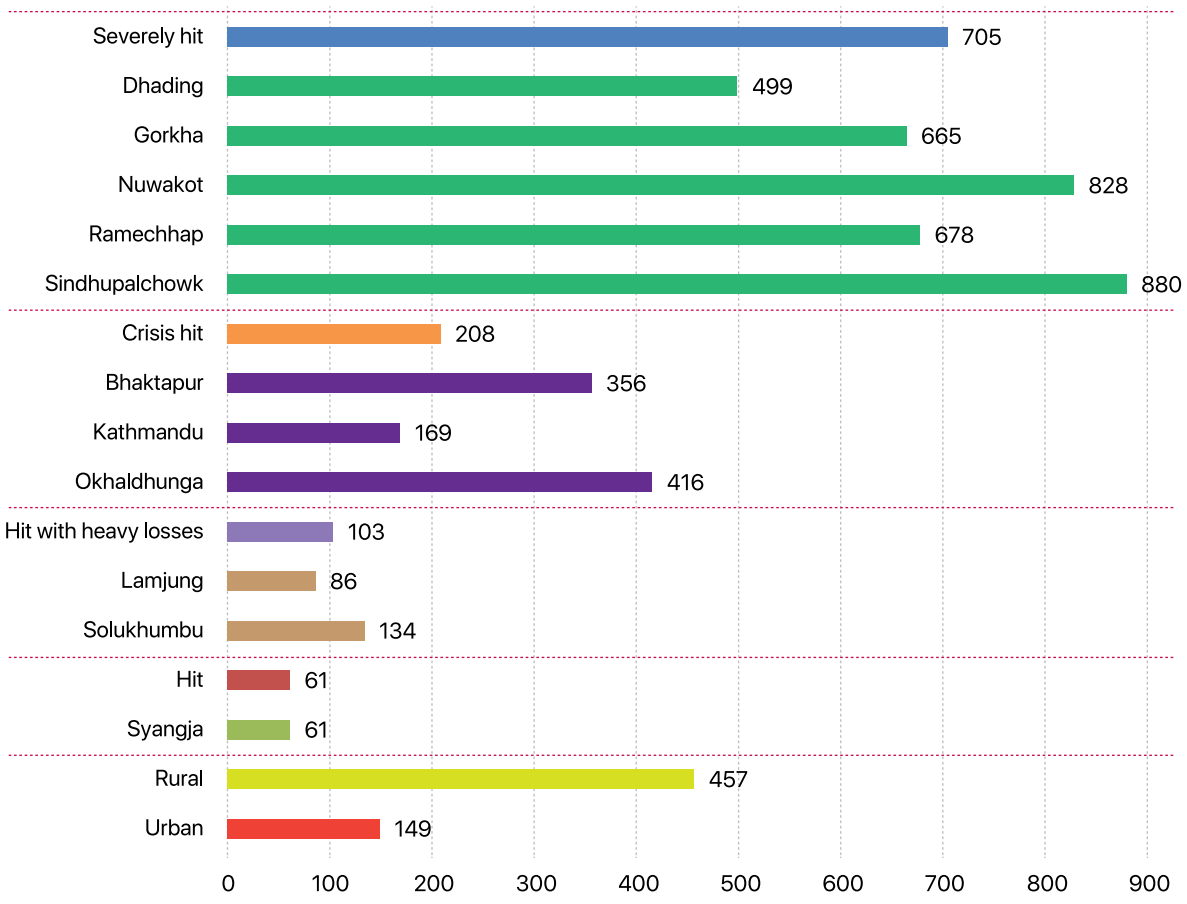
The IRM surveys looked at how long people stayed in temporary accommodation before moving back into their own home. On average, people in earthquake-affected areas spent just under one year (351 days) in temporary accommodation (mostly shelters or other people's homes – see below) before returning to their house. People with high incomes were able to return back to their own homes much faster (132 days) than those with middle or low incomes (333 days and 513 days, respectively).[3]

Those with completely destroyed houses had to stay elsewhere the longest (599 days) followed by those with major damages (209 days); yet, even people with minor damages (61 days) and no damages (46 days) stayed elsewhere for nearly two months, possibly as a result of safety concerns due to recurring aftershocks.

People in rural areas spent more than twice as long in temporary housing (457 days) than those in urban areas (149 days). People in severely hit districts spent much longer outside their homes (705 days) than people in lesser hit districts (61-208 days in other district impact categories) (Figure 2.2). Across districts, people in Sindhupalchowk (880 days) and Nuwakot (828 days) reported the highest number of days living in shelters or other people's homes – between two and two-and-a-half years.

3 The monthly income of those in the low-income group is up to NPR 9,999 (USD 84.92); the monthly income of those in the medium-income group ranges from NPR 10,000 (USD 84.93) to NPR 19,999 (USD 169.86); the monthly income of those in the high-income group is above NPR 20,000 (USD 169.87). See Chapter 1 for definitions and explanations of income levels as well as of other variables.

Figure 2.2: Time spent in temporary housing – by district impact, district, urban/rural (IRM-5, weighted, base=5,857)

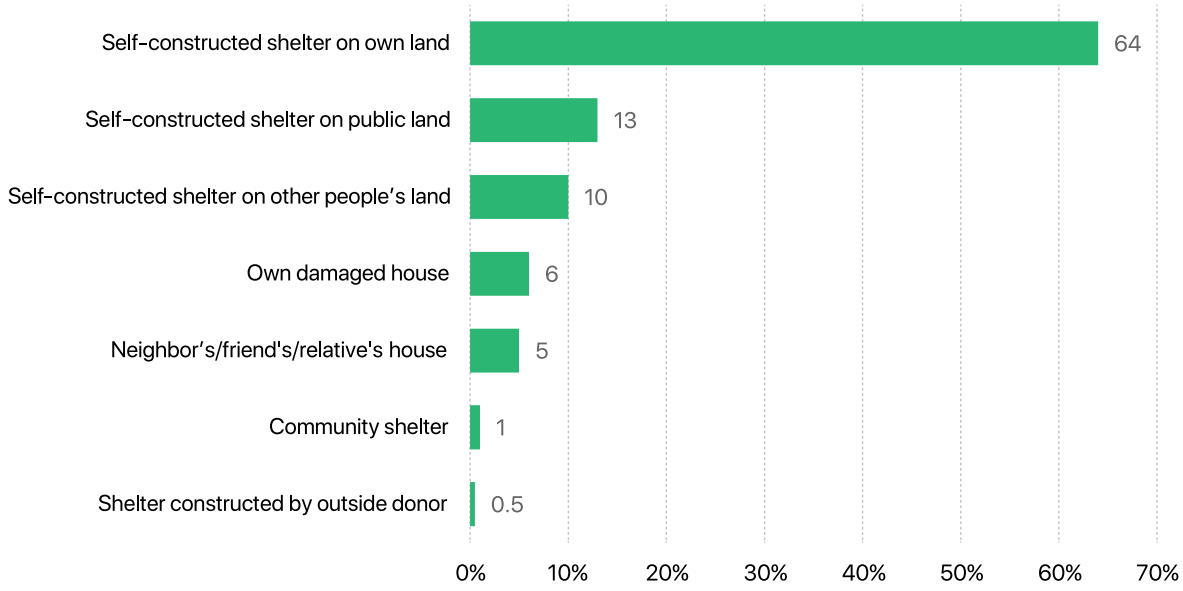


Where did people stay until they could return to permanent housing?

As described below (Section 2.3), the large majority had returned to their own houses (partially or fully rebuilt or repaired or unrepaired) by IRM-5. Those who reported living in their own houses, were asked where they had stayed until their own houses became livable again. Most had stayed in self-constructed shelters (87%)—on their own land (64%), on public land (13%) or on other people's land (10%). Very few stayed in shelters constructed by donors (0.5%) or community shelters (1%) – although several of those who stayed in self-constructed shelters have likely built those with aid provided by donors such as tarps or corrugated iron sheets.[4]

4 Previous IRM survey findings showed that many people received aid in the first year after the earthquake, such as tarps or tents, or cash, and used this to build temporary shelters.

Figure 2.3: Temporary housing before return to own house (those who were living in own partially or fully repaired/rebuilt house, IRM-5, weighted, base=4,173)



Most people in rural areas stayed in self-constructed shelters on their own land (78%) while those in urban areas were more likely to have stayed in constructed shelters on public land (Table 2.3). Across districts with varying earthquake impacts, most people said they stayed in self-constructed shelters on their own land. Those in Lamjung were noticeably more likely than people in other districts to have lived in their own damaged house (45%).

Table 2.3: Temporary housing before return to own house – by district impact, district, urban/rural (for main types of temporary housing, those who were living in own partially or fully repaired/rebuilt house, IRM-5, weighted, base=4,173)

	Self-constructed shelter on own land	Self-constructed shelter on other people's land	Self-constructed shelter on public land	Own damaged house
	%	%	%	%
Overall	***64***	***13***	***10***	***6***
Severely hit	**84**	**9**	**4**	**2**
Dhading	88	6	4	0
Gorkha	76	7	9	4
Nuwakot	89	9	1	0
Ramechhap	92	2	2	3
Sindhupalchowk	76	18	2	2
Crisis hit	**54**	**6**	**5**	**26**
Bhaktapur	42	14	18	5
Kathmandu	40	14	29	7
Okhaldhunga	84	2	2	11
Hit with heavy losses	**45**	**13**	**24**	**8**
Lamjung	36	8	5	45
Solukhumbu	80	3	6	1
Hit	**75**	**0**	**8**	**5**
Syangja	75	0	8	5
Rural	**78**	**8**	**5**	**5**
Urban	**22**	**15**	**37**	**11**

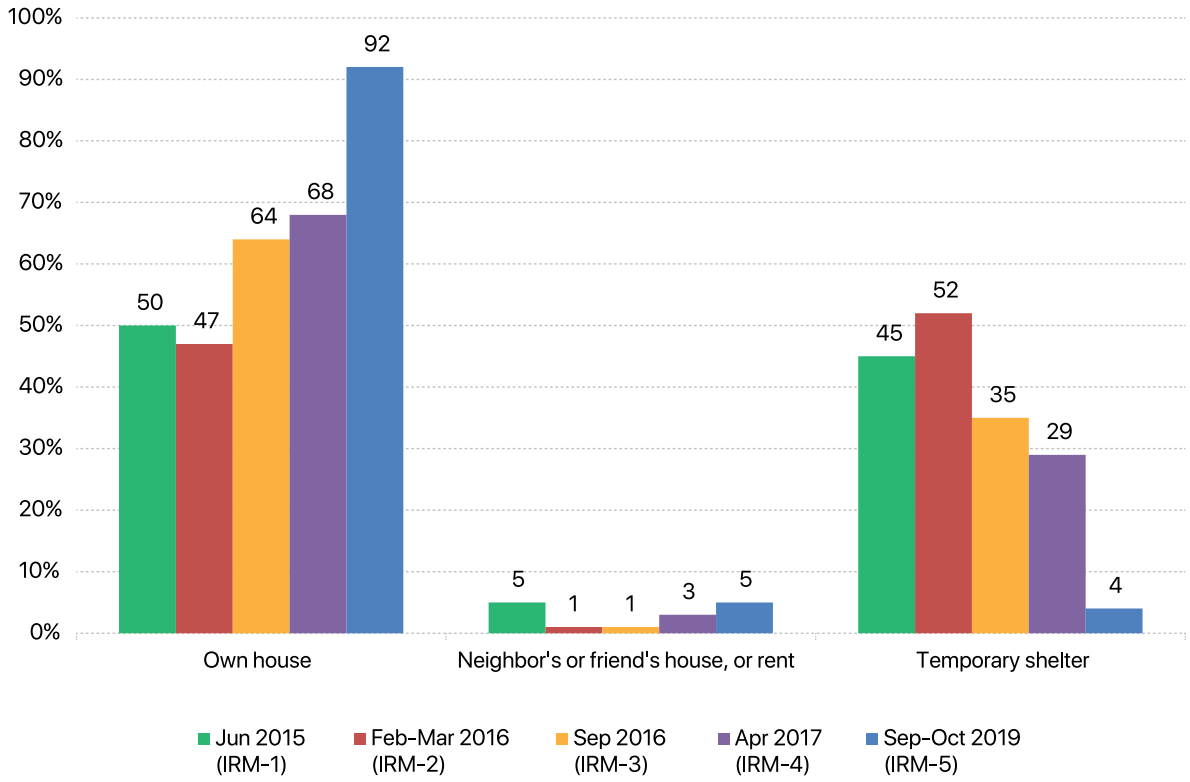
2.3 Current housing

The IRM survey looked at where people lived during each survey round, and at progress in reconstruction (i.e. what they had done to rebuild/repair their house). The latter is discussed in Chapter 3.1. This section describes the housing status of households in earthquake-affected areas from 2015 to 2019. This reveals where people were living at the time of the survey, not whether they were also in the process of rebuilding or repairing/retrofitting their house, which is discussed in Chapter 3.

Housing status

Nearly five years after the earthquake, most people had moved back into their own house[5] (92%) – an increase of 24 percentage points since IRM-4 (April 2017). Compared to immediately after the earthquake in June 2015 (IRM-1), the share who lived in their own home had almost doubled (from 50% in IRM-1, to 92% in IRM-5). During the same time period, the share of people who lived in temporary shelters[6] decreased by 41 percentage points (45% in IRM-1, to 4% in IRM-5). The movement from shelters to own homes did not appear to be one-directional. Between IRM-1 and IRM-2, there was movement from own homes into shelters (in IRM-2), and subsequently back into own homes beginning in IRM-3 (Sept 2016), showing that there was some uncertainty in the early years after the earthquake when people had to move between their own homes and shelters due to safety concerns or to demolish and rebuild their house. During the last three rounds of IRM data collection (IRM-3 to IRM-5), there was a steady increase in people moving out of shelters and into their own house (from 64% to 92%), or to the houses of friends/neighbors or rented accommodation (from 1% to 5%).

Figure 2.4: Housing status 2015-2019 (IRM-1 base=2,980, IRM-2 base=4,850, IRM-3 base=4855, IRM-4 base=4,854, IRM-5 base=5,857, weighted)



5 'Own house' means either a fully or partially rebuilt/repaired house, a house not damaged by the earthquake, or an old house damaged by the earthquake and not yet rebuilt/repaired.

6 'Temporary shelter' means either a self-constructed shelter, a community shelter, or a shelter constructed by an individual or institutional donor.

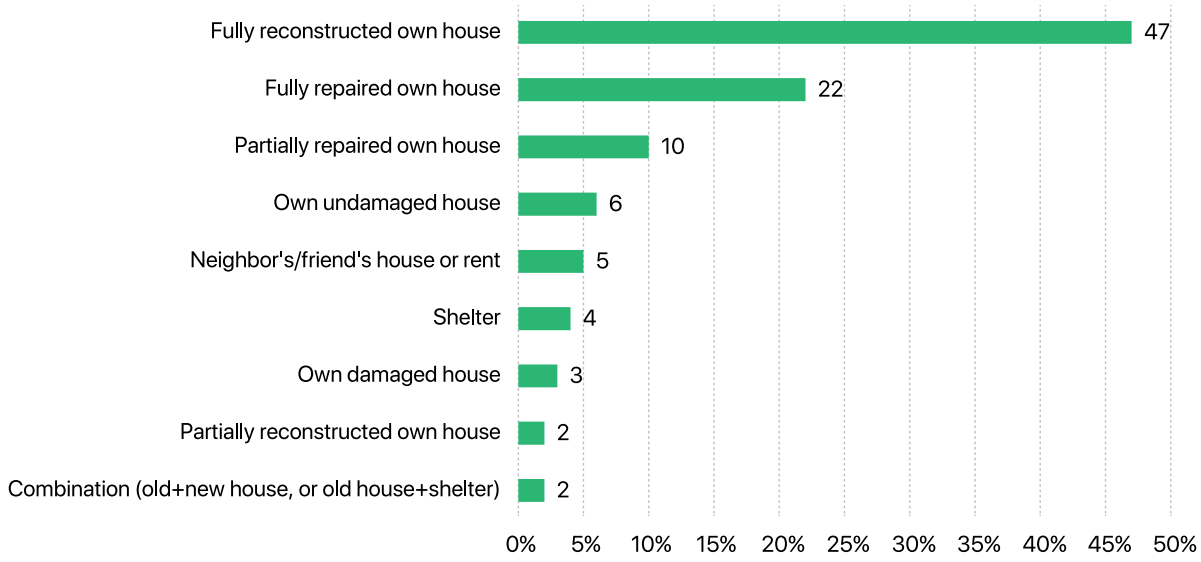
Of those who had sustained housing damages, very similar shares had moved back into their own houses by IRM-5: 92 percent of those reporting earthquake damages to their house were back in their own house – whether repaired, rebuilt, unrepaired or undamaged – while four percent were in temporary shelters and the remaining shares in other types of housing.

Type of housing

Although most people whose house had sustained earthquake damage were living in their own house by IRM-5 (Sept-Oct 2019), the type of housing they lived in varied considerably.[7] Overall, by late 2019, three-quarters (75%) of households with housing damage lived in a rebuilt or repaired house, or another house not damaged by the earthquake. Most lived in a fully rebuilt (47%) or repaired (22%) house. A small share (6%) reported living in a (second) house which was not damaged by the earthquake.[8]

Fifteen percent said they lived in a partially rebuilt or partially repaired house (12%), or in a damaged, unrepaired house (3%) – likely a potentially unsafe accommodation. The remaining shares were in other types of housing, such as temporary shelters, renting, or friends' or neighbors' houses.[9]

Figure 2.5: Type of housing (those self-reporting some level of housing damage, IRM-5, base=4,832, weighted)



7 The options were read out to the respondents. In an attempt to get an insight into as many particularities as possible, respondents were allowed to choose from the following options: 1) Completely reconstructed own house, 2) Completely repaired own house, 3) Own house not damaged by earthquake, 4) neighbor's house, 5)friend's house, 6) shelter constructed by donor (not self-constructed) on own land, 7) partially reconstructed own house, 8) partially repaired own house, 9) self-constructed shelter on own land, 10) self-constructed shelter on other people's land, 11) self-constructed shelter on public land, 12) shelter constructed by outside donor on public land, 13) own house damaged by earthquake but not yet repaired or reconstructed, 14) community shelter, 15) both, old damaged house as well as new house (new house partially or completely rebuilt), 16) both, old damaged house as well as shelter, and 17) House constructed by donor

8 Even though this analysis only looks at those respondents who reported some level of housing damages, 6% said they lived in a house not damaged by the earthquake – most likely a second house that was undamaged.

9 This data does not adequately represent mixed housing solutions. Only 2% said they lived in both, a pre-earthquake house and a rebuilt house, or a shelter and a pre-earthquake house. Other data (see Chapter 3.3) and qualitative research conducted alongside this survey suggest that larger shares live in both new and old houses. Aid and Recovery in Post-Earthquake Nepal: Independent Impacts and Recovery Monitoring Phase 5 – Qualitative Field Monitoring (November 2019). Kathmandu: The Asia Foundation

There was little variation in the type of housing people lived in by Sep/Oct 2019 (IRM-5) in the different areas. Most people across all 11 districts said that they lived in their completely reconstructed own house. However, fewer people in urban areas were living in a rebuilt house than in rural areas (Table 2.4).

Table 2.4: Type of housing – by district impact, district, urban/rural (those self-reporting some level of housing damage, IRM-5, weighted, base=4,832)

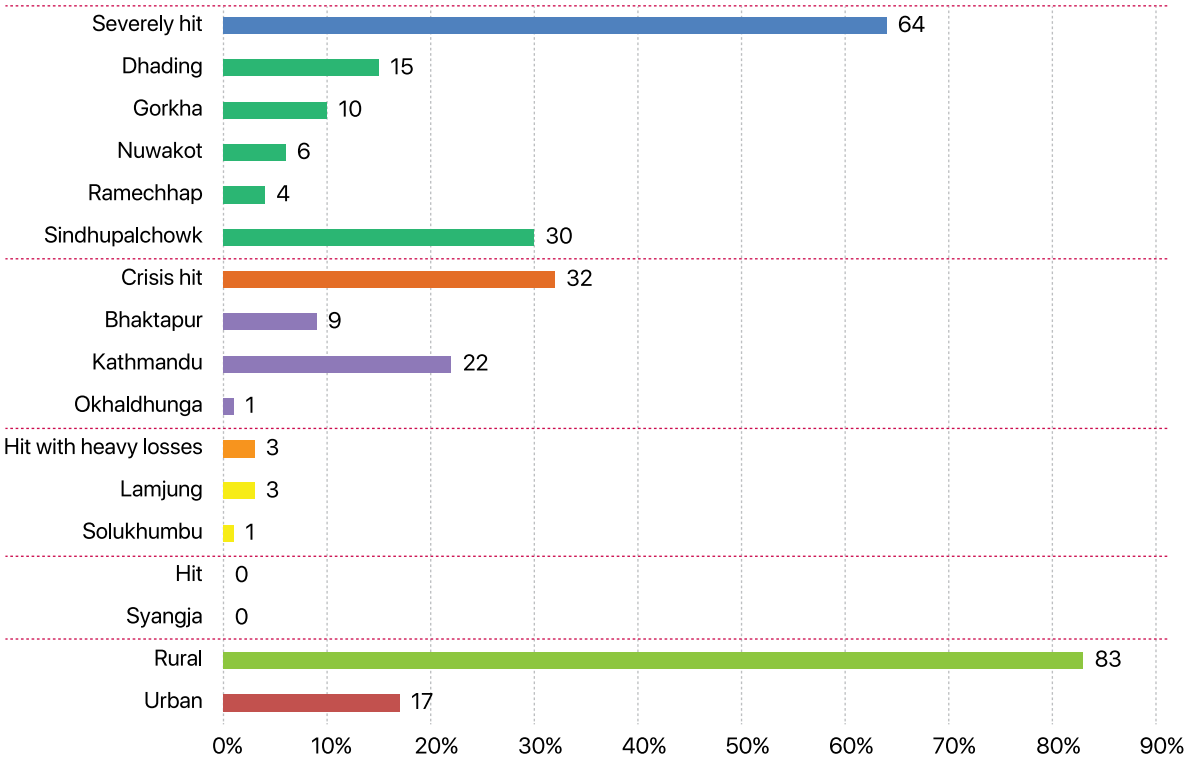
	Fully reconstructed own house	Fully repaired own house	Partially reconstructed own house	Partially repaired own house	Own house not damaged by earthquake	Own damaged house	Neighbor/ friend's house or rent	Shelter	Combination
	%	%	%	%	%	%	%	%	%
Overall	***47***	***22***	***2***	***10***	***6***	***3***	***5***	***4***	***2***
Severely hit	**75**	**8**	**2**	**3**	**1**	**2**	**1**	**6**	**2**
Dhading	66	12	0	5	3	3	0	5	6
Gorkha	77	11	1	2	1	1	1	5	1
Nuwakot	84	4	6	1	0	1	2	3	1
Ramechhap	76	5	0	6	2	6	1	3	1
Sindhupalchowk	76	4	2	1	1	1	1	14	0
Hit with heavy losses	**42**	**31**	**1**	**7**	**2**	**14**	**1**	**1**	**1**
Bhaktapur	31	32	5	9	10	2	6	5	1
Kathmandu	27	29	1	16	12	1	10	2	2
Okhaldhunga	60	19	1	7	3	8	1	1	0
Crisis hit	**30**	**28**	**2**	**14**	**11**	**2**	**9**	**3**	**2**
Lamjung	57	37	0	1	4	0	1	0	1
Solukhumbu	32	27	2	12	1	24	0	2	0
Hit	**13**	**49**	**2**	**24**	**1**	**8**	**2**	**0**	**1**
Syangja	13	49	2	24	1	8	2	0	1
Rural	58	15	1	9	4	4	3	4	2
Urban	20	40	2	14	12	2	8	3	0

2.4 Temporary and semi-temporary shelters

In the first IRM survey conducted two months after the earthquake, 39 percent of all respondents (45% of respondents with housing damages – see above) lived in temporary shelters. Since then, there was a steady decline in the share of people living in temporary shelters. In the two-and-a-half-year gap between IRM-4 and IRM-5, there was a massive decrease in the share of people who lived in temporary shelters, with just four percent saying they lived in shelters by IRM-5. People in shelters were primarily in self-constructed shelters on their own land (few mentioned building them on other people's or public land, or being in community shelters).

Of the four percent of respondents still in temporary shelters (219 people), 83 percent were in rural areas and 17 percent in urban areas. Most of those in shelters were in severely hit districts (64%) or crisis hit districts (32%). Sindhupalchowk (30%) and Kathmandu (22%) had the highest share of people living in shelters in IRM-5.

Figure 2.6: Share of people in temporary shelters – by district impact, district, rural/urban (IRM-5, base=219, weighted)



Type of shelter: As in previous IRM survey rounds, almost all of those e in shelters lived either in corrugated iron (CGI) shelters (69%) or shelters made from a combination of CGI and wood or bamboo (21%).

Satisfaction and issues with shelters: Just over four in ten people who lived in temporary shelters were dissatisfied (44%) with conditions in their current shelter; about three in ten were either neutral (27%) or satisfied (28%). Those still staying in shelters were also asked about the main issues they faced in the shelter during the last monsoon. Leaking roof/walls (43%) continued to be the top issue for people still living in shelters, followed by cold temperatures (41%). However, the share who mentioned leaks declined since IRM-3 and IRM-4. There was a slight increase in the share of people who mentioned poor sanitation facilities as an issue in shelters (15%) compared to previous surveys. One in three people still in shelters (35%) did not report any issues with their shelter during the last monsoon.

Prospect of leaving temporary shelters

People who lived in temporary shelters were also asked about their future housing plans. Two in three respondents living in temporary shelters were pessimistic about moving out of temporary shelters, 36 percent said they wanted to move but believed they would stay in the shelter long-term, and 32 percent said they would leave as soon as they can but did not have an idea when that might be. Twenty-six percent of respondents said they wanted to move and were optimistic that they would leave soon. Only 6 percent said they did not want to move and that they would stay in the shelter long-term.

Figure 2.7: Outlook on leaving temporary shelter (those still living in shelters, IRM-5, base=219, weighted)

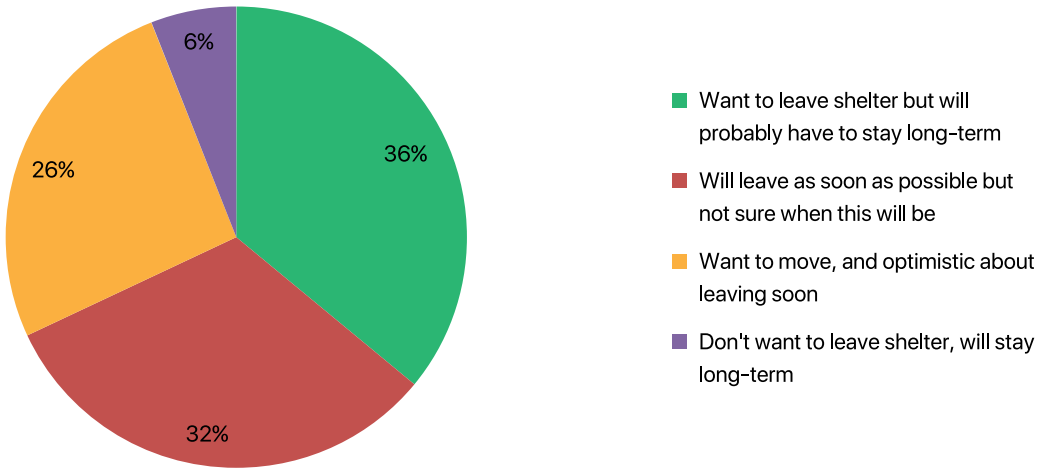


Photo: Prabhat R Jha (Sindhupalchowk)

Chapter 3
Housing reconstruction

Photo: Manasi Prasai (Tanglichok, Gorkha)

This chapter looks at progress in housing recovery over time by examining what people have done to rebuild/repair their houses (information on damages and current housing is presented in Chapter 2). It also presents findings on the timelines of when people began and completed the reconstruction or repair of their houses. Findings on the size and use of newly built houses and the demolishing of older damaged houses are discussed. Further, the chapter includes information on reconstruction costs and access to construction materials as well as the types of assistance and information people have received for reconstruction purposes.

Key Findings

Progress in reconstruction

- There has been considerable progress in housing recovery, with over half of earthquake-affected households having completed reconstruction work, and another 21 percent having started reconstruction/repair work. People in more severely impacted districts and those who reported that their house was completely destroyed were more likely to have completed repairing/rebuilding their house. People in more remote and rural areas were more likely to have completed reconstruction than those in urban or less remote areas.

- Most people with some level of earthquake damage began reconstruction one or two years after the earthquake and completed it two or three years after the earthquake.

- Most respondents who reported having earthquake damage were currently living in fully or completely repaired/rebuilt houses. Two in ten earthquake-affected households said they had not started reconstruction work. These households tended to be in less affected districts and in less remote and urban areas, and reported lower levels of damage.

- Most reconstructed homes had three rooms or fewer. Those who built new homes were in smaller houses compared to those who just had to repair their old home. People felt that their reconstructed house was safer than their old house and were satisfied with their house.

- Half of those who reported earthquake damage had not demolished their earthquake-damaged house. Most of the people who demolished the damaged house reported that the earthquake had completely destroyed their house. The main reason for not demolishing a damaged house was that it was still in use. The top two uses for damaged houses were for living/sleeping and for storage.

Rebuilding costs

- The average building costs given by those who completed reconstruction was NPR 1,196,887 (USD 10,069). The cost of materials used was much cheaper if they were locally available, for most items. Costs appeared to be lower for more remote households than for less remote and urban households.

Reconstruction assistance

- Cash and technical assistance were the top forms of assistance received by those who were in the process of, or had completed, reconstruction. Cash was also mentioned as the most useful form of assistance received by those who got assistance. Additionally, those who were in the process or had not started the reconstruction process said that cash would be the most needed form of assistance.

Access to information

- As in IRM-3 and IRM-4, family, friends, and neighbors were overwhelmingly the top sources for information on reconstruction.

- A majority of respondents felt confident of being able to communicate with NRA officials as well as technical officers/engineers and believed that the experience would be good. People in more remote and rural areas were more likely to hold this view. Opinions were similar among those who got the first, second, or all three tranches of the NRA grant.

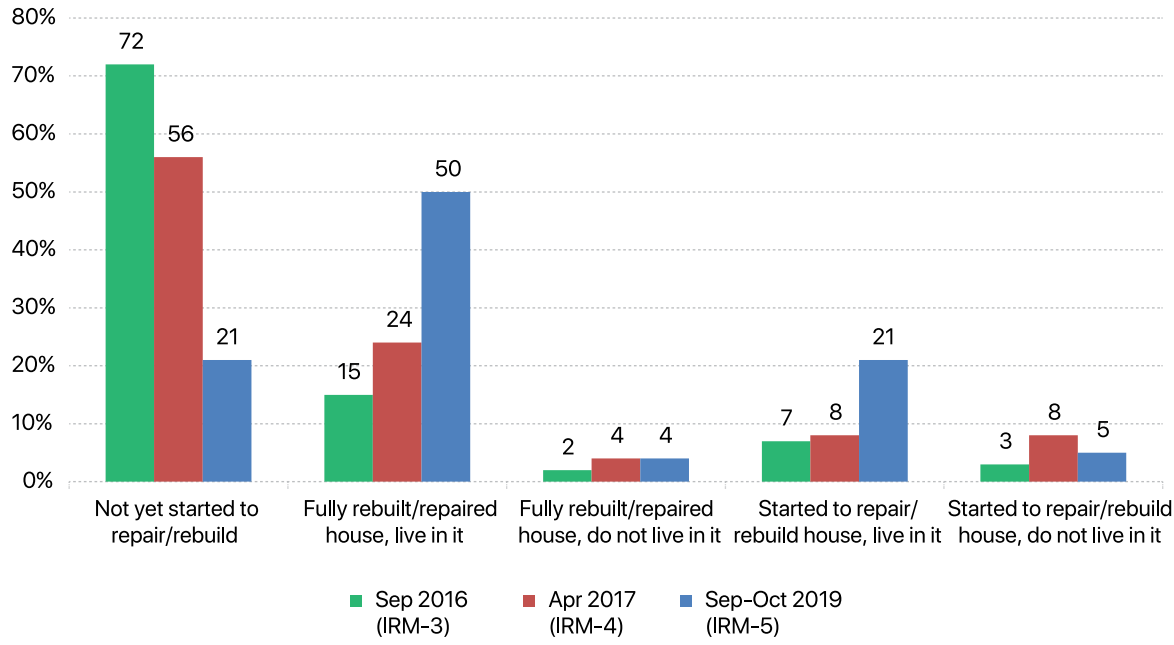
3.1 Progress in Reconstruction

Progress in rebuilding/repairing houses over time

In addition to tracking what housing people were living at the time of each survey round (Chapter 2), the IRM surveys also tracked what people had done toward rebuilding/repairing homes if they experienced any level of damage due to the 2015 earthquake. While findings for where people were living showed that there had been considerable progress in people moving out of shelters and back into their houses, findings for rebuilding/repairing progress confirmed that there had been good progress in reconstruction between early 2017 (IRM-4) and late 2019 (IRM-5). By IRM-5, half of households with earthquake housing damage had completely finished rebuilding or repairing their

house and were living in the house. In IRM 3, only 15 percent of households were at this stage of reconstruction, and 24 percent in IRM-4. The share of households who had started to repair/rebuild and were also staying in the house during the repairs/rebuilding was less than five percent in IRM-4, but increased substantially to 21 percent by IRM-5. Since 2016, between two and four percent of respondents said that they had built a new house, but did not live in it; and a similar share (3-8%) said they had started to rebuild/build a new house, but did not live in it. In IRM-5, 21 percent said they had done nothing to rebuild/repair their house, a significant decrease from 56 percent in IRM-4, and 72 percent in IRM-3.

Figure 3.1: Progress in reconstruction (those who reported housing damage, IRM-1 base=2,413, IRM-2 base=3,880, IRM-3 base=3,835, IRM-4 base=3,931, and IRM-5 base=4,832, weighted)



When did people begin rebuilding/repairing their house?

Rebuilding or repairing houses began either one year (28% in 2016/17) or two years (29% in 2017/18) after the earthquake, for most earthquake-affected people. Only nine percent of respondents began rebuilding/repairing a few months after the earthquake in 2015/16 and 15 percent towards the end of that year. The rest began rebuilding/repairing three or four years after the earthquake (16% in 2018/19 and 3% in 2019/2020).[1] There were some notable differences across districts. A majority of respondents in Syangja (55%), classified as "hit" by the earthquake, started reconstruction work sooner than the average, just a few months after the earthquake. Reconstruction work began sooner in Kathmandu, too: nearly 60 percent started work towards the end of 2015/16 (29%) or 2016/17 (29%). In contrast, most residents (59%) with damaged houses in Lamjung started reconstruction much later, in 2018-19.

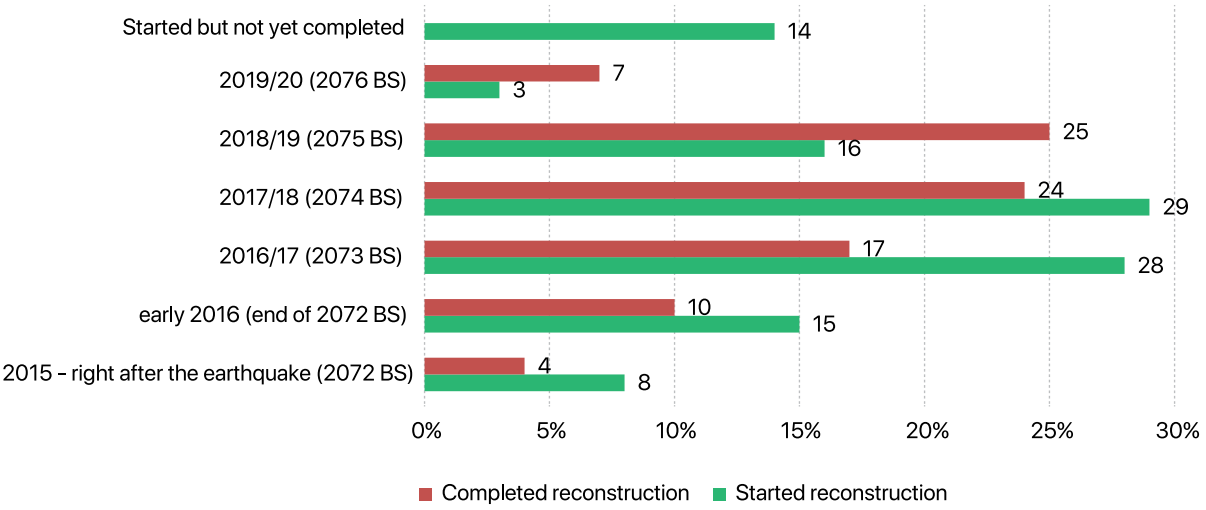
Individuals who experienced higher levels of damage started their rebuilding/repair work later than those with lesser damage. People with houses classified as fully damaged had mostly started repairing/rebuilding one year after the earthquake (2016/17, 30%) or two years later(2017/18, 36%); and 20 percent started three years later (2018/19, 20%). Among those whose houses were classified as partially damaged, similar shares began repairing/rebuilding towards early 2016 (27%) or in

1 Nepali dates were used when asking this question. The Nepali year (Bikram Sambat=BS) runs from April to April: : 2072 BS=2015/16 AD (April 2015 to April 2016), 2073 BS=2016/17 AD, 2074 BS=2017/18 AD, 2075 BS=2018/19 AD, 2076 BS=2019/2020.

2016/17 (30%), and 17 percent began work in 2017/18. Respondents whose houses were classified as normal/not damaged began repairing/rebuilding within the year the earthquake occurred, either a few months after the earthquake (28%), or towards the end of the year (36%). By 2016/17, another 18 percent had started work and 10 percent had done so in 2017/18.

Level of income did not largely affect when people could start repairing or rebuilding their homes. However, those with higher incomes were slightly more likely to have begun work towards early 2016. People in urban areas and those living less than an hour away from the district headquarters also tended to have begun repairing/rebuilding their houses towards early 2016.

Figure 3.2: Start date and completion date of reconstruction (those self-reporting some housing damages and who have started reconstruction; base=3,820 for start, 3,786 for end)



When did people complete rebuilding/repairing their house?

Most people with housing damages completed rebuilding/repairing their house either two (24%) or three (25%) years after the earthquake. Few people had completed work within the year of the earthquake (14% by early 2016) and even a year later (17% in 2016/17). Just seven percent said they finished work in 2019 (Figure 3.2).

Across districts, Syangja was the only district where a majority finished the work by early 2016, 37 percent had completed work within the first few months after the earthquake, and another 22 percent did so by the end of that year. Other districts completed the work by either 2017/18 or 2018/19.

People with houses classified as fully damaged said they completed rebuilding or repairing in either 2017/18 or 2018/19; few said work was completed by early 2016 or by 2016/17. Those with higher incomes were slightly more likely to say they completed work by early 2016 or by 2016/17; however high earners were not more likely than others to have completed work right after the earthquake.

Who had completed rebuilding/repairing their house after five years?

Fifty-four percent of respondents who reported some earthquake damage said they had fully repaired/rebuilt their house after the earthquake (Figure 3.1 and Table 3.1). People living in severely hit districts were more likely to have fully repaired/rebuilt their house compared to other districts. At least seven in ten respondents in severely hit districts said they had fully repaired/rebuilt their house, compared to less than half of respondents in districts classified with lower levels of earthquake damage (except Okhaldhunga where 64% of respondents had completed their house). Similarly, respondents whose house was officially classified as fully damaged (74%) were far more likely than those classified as partially damaged (24%) or normal/not damaged (18%) to have completed rebuilding/repairing. Likewise, the proportion of respondents who reported that they fully rebuilt/repaired their house were twice as likely to be in rural areas (63%) than in urban areas (30%). Similarly, residents of remote areas were more likely to report they had fully repaired/rebuilt their house than those who were in less remote areas (Table 3.1).

Who was still rebuilding/repairing the house after five years?

A quarter of respondents who reported some earthquake damage said they were in the process of rebuilding/repairing their house in IRM-5. The share of respondents who were still rebuilding/repairing their house was relatively higher in crisis hit districts (35%) and hit districts (32%). They also tended to have been classified as partially damaged in the official assessment. People in urban areas (35%) were more likely than those in rural areas (21%) to still have been rebuilding/repairing their house at the time of IRM-5 (Table 3.1).

Who had not yet started to rebuild/repair?

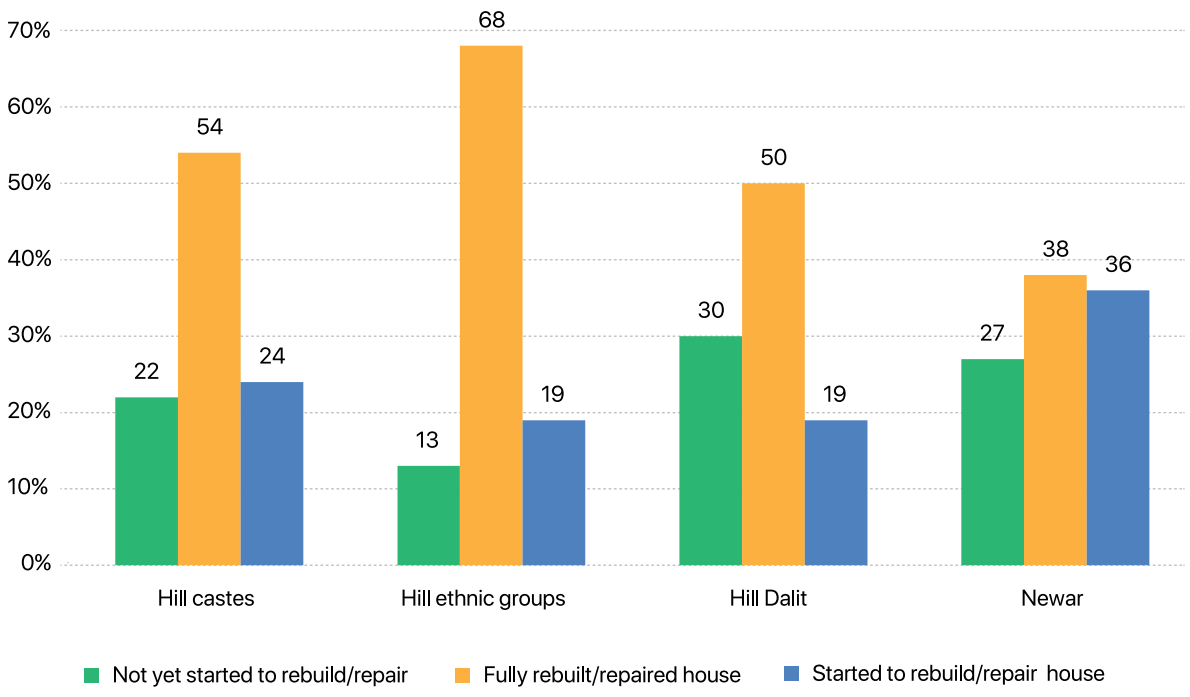
Two in ten households (21%) said that they had not yet started to rebuild/repair their house in IRM-5. Residents of the districts that suffered comparatively less damage were more likely to report that they had not started to repair or rebuild their house. Residents in Lamjung (59%), a district hit with heavy losses, were the most likely to have not yet started to rebuild/repair their house. Similarly, residents of Syangja (32%), a hit district, mentioned that they had not done anything to rebuild/repair their house. People in urban areas (35%) were twice as likely as those in rural areas (16%) to report not having started to rebuild/repair (Table 3.1).

Table 3.1 Status of housing recovery – by district impact, district, urban/rural, and remoteness (among those who reported housing damage, IRM-5, weighted, base=4,832)

		Not yet started to rebuild/repair	Fully rebuilt/re-paired house	Started to rebuild/ repair house
		(%)	(%)	(%)
Overall		***21***	***54***	***25***
District impact and districts	**Severely Hit**	**8**	**78**	**14**
	Dhading	14	70	16
	Gorkha	6	80	13
	Nuwakot	3	83	13
	Ramechhap	13	80	7
	Sindhupalchowk	3	81	16
	Crisis Hit	**28**	**38**	**35**
	Bhaktapur	20	37	43
	Kathmandu	30	35	35
	Okhaldhunga	22	64	13
	Hit with heavy losses	**39**	**43**	**18**
	Solukhumbu	11	53	35
	Lamjung	59	36	5
	Hit	**32**	**35**	**32**
	Syangja	32	35	32
Rural/urban	Rural	16	63	21
	Urban	35	30	35
Remoteness	Less than 1 hour away	29	37	34
	More than 1 but less than 3 hours away	18	57	25
	More than 3 hours but less than 6 hours	15	70	15
	More than 6 hours	13	78	8

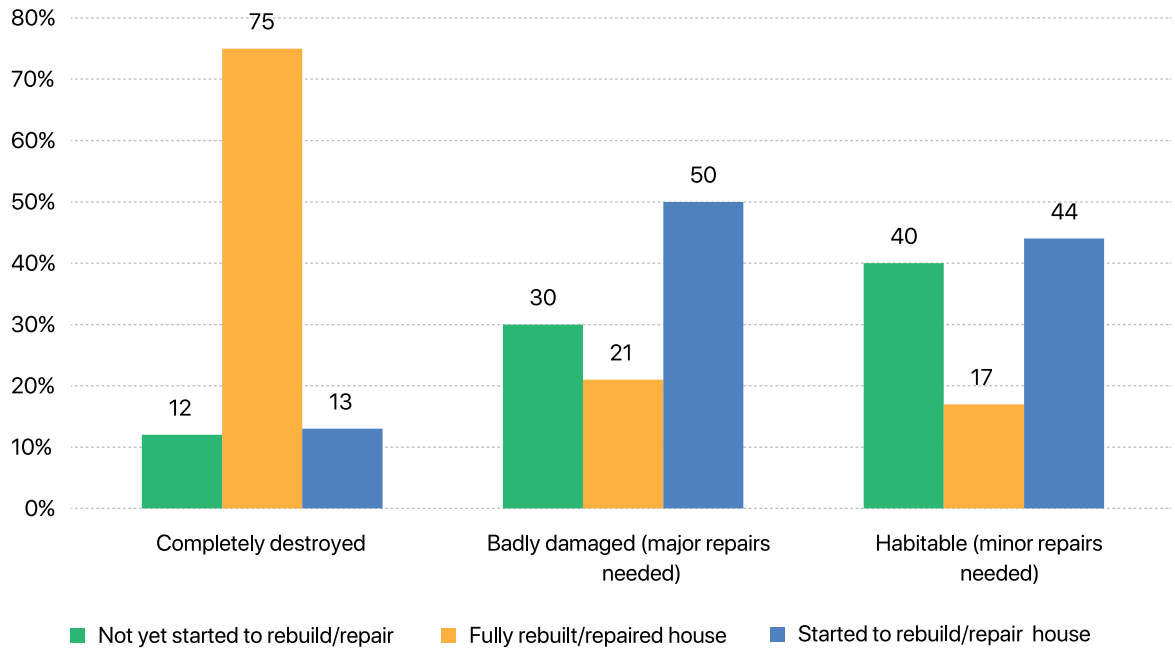
Among caste/ethnic groups, Hill Dalits (30%) and Newars (27%) were more likely than people of other caste-ethnic groups to say they had done nothing to rebuild/repair their home.

Figure 3.3: Status of housing recovery – by caste/ethnicity (among those who reported housing damage, IRM-5, weighted, base=4,832)



People who reported lower levels of damage were also more likely to not have started reconstruction (30% badly damaged, 40% habitable, 13% completely destroyed house).

Figure 3.4: Status of housing recovery – by reported housing damage (among those who reported damages, IRM-5, weighted, base=4,832)



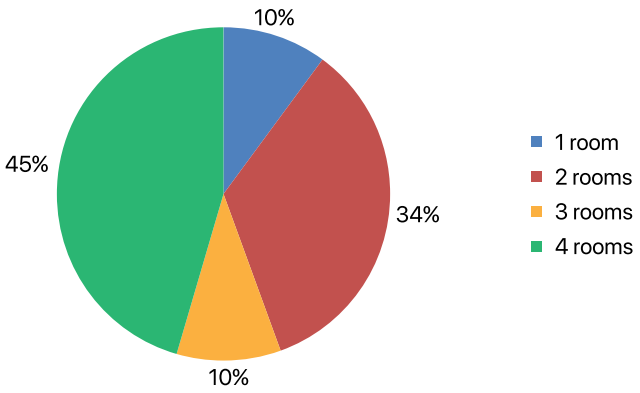
3.2 Newly built houses

About eight in ten households who reported earthquake damage had done something towards repairing/rebuilding their home. Earthquake-affected households which had started and/or completed reconstruction/repairs of their house were asked a series of questions on the location, size, usage, safety, and satisfaction with the new home.

Size of new houses

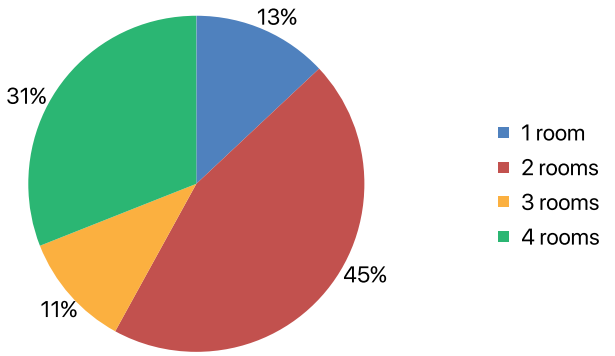
Earthquake-affected households who had completed rebuilding/repairing, or were in the process of doing so, were asked about the number of rooms in their new house. Overall, 45 percent said the houses has or will have four or more rooms, 10 percent said three rooms, 34 percent said two rooms, and 10 percent said one room (Figure 3.6).

Figure 3.5: Size of house (those who have completed rebuilding/repairing or are in the process of rebuilding/repairing; base=3787)



Looking at only those who had rebuilt a new house and were living in it, larger shares (58%) lived in houses with one or two rooms (45% in two-room houses and 13% in one-room houses), while fewer lived in houses with three or more rooms (Figure 3.6).

Figure 3.6: Size of house (those living in a fully rebuilt house; base=2285)

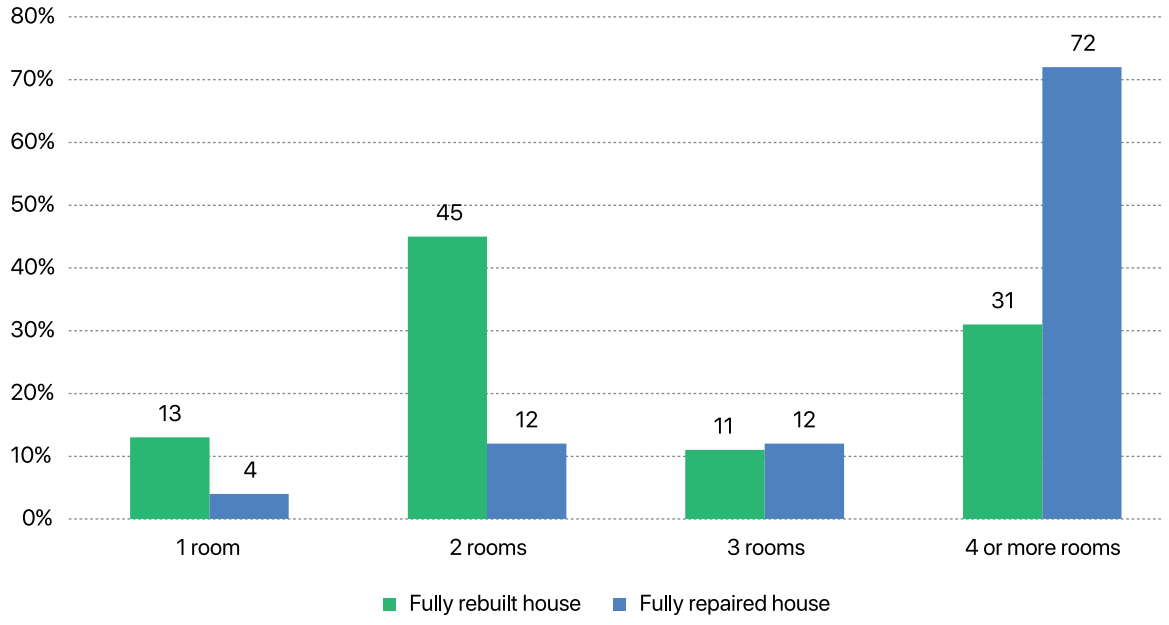


Future expansion of homes: Eight in ten respondents (79%) who fully rebuilt or were in the process of doing so said that they did not plan on adding more rooms to the house in the future; but one in five (21%) planned to add more rooms.

Size of new houses compared to size of repaired houses

Newly built houses were smaller compared to repaired houses. While newly rebuilt homes tended to be ones with two rooms or less, a majority of fully repaired houses had four or more rooms.

Figure 3.7: Size of house – rebuilt houses vs repaired houses (among those who reported housing damages and were living in a fully rebuilt house or a fully repaired house, IRM-5, weighted, base=3,787)



There were important variations in the number of rooms in the new house across districts and area of settlement. Residents of Kathmandu (82%), Bhaktapur (82%), and Syangja (64%) were the most likely to report that their house had four rooms. Residents in Dhading were most likely to say their house had one room (30%). A large majority of Okhaldhunga (85%) and Ramechhap (80%) residents said their reconstructed house had two rooms. People in urban areas were far more likely than those in rural areas to say their house was/will be a four-room house (78% to 36%). Similarly, those in more remote locations were more likely to have one- or two-room houses (82%) than those in other places (53% in remote, 19% in less remote).

Income level also had a bearing on the number of rooms people had. For instance, 67 percent of respondents belonging to the high-income bracket said that had four or more rooms, while 31 percent of medium-income respondents, and 18 percent of low-income respondents had houses with four or more rooms.

Table 3.2: Size of house – by district, impact, remoteness, rural/urban, income (those who have completed rebuilding/repairing or are in the process of rebuilding/repairing, IRM-5, weighted, base=3,786)

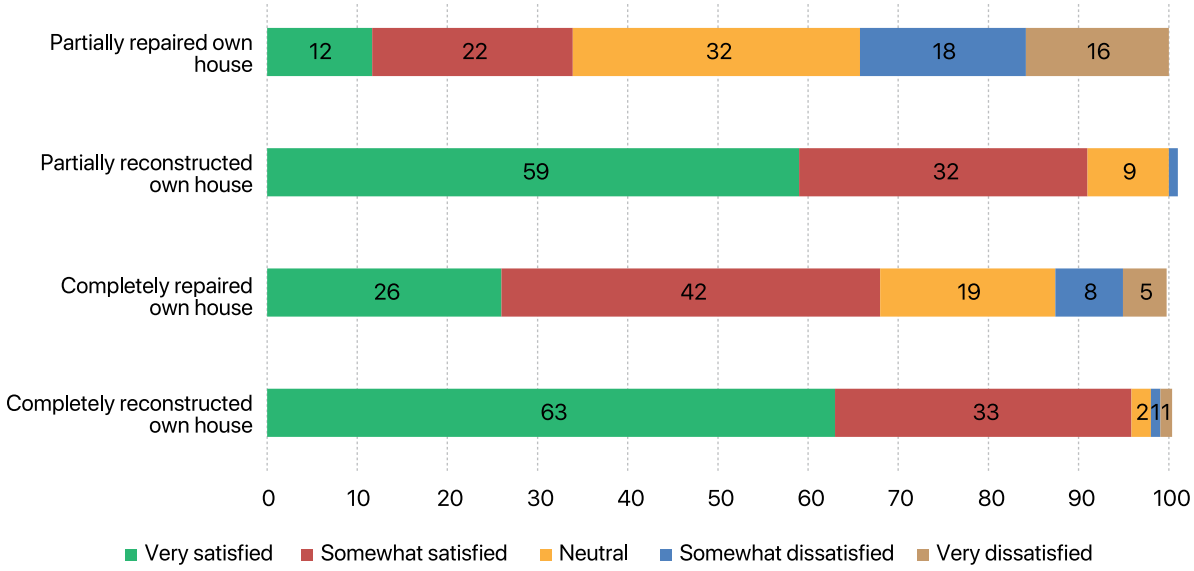
		1 room	2 rooms	3 rooms	4 or more rooms
Overall		***10***	***34***	***10***	***45***
District impact and district	**Severely hit**	**20**	**55**	**9**	**16**
	Dhading	30	47	9	13
	Gorkha	24	50	10	16
	Nuwakot	22	52	8	18
	Ramechhap	5	80	9	6
	Sindhupalchowk	12	56	11	21
	Crisis hit	**1**	**15**	**9**	**75**
	Bhaktapur	1	4	13	82
	Kathmandu	1	8	8	82
	Okhaldhunga	4	85	5	5
	Hit with heavy losses	**4**	**41**	**23**	**31**
	Solukhumbu	7	35	29	28
	Lamjung	0	50	13	37
	Hit	**2**	**17**	**17**	**64**
	Syangja	2	17	17	64
Rural/urban	Rural	12	42	10	36
	Urban	2	10	10	78
Remoteness	Less remote	4	15	10	71
	Remote	12	41	10	36
	More remote	21	61	9	9
Income	Low	18	55	9	18
	Medium	13	45	11	31
	High	4	18	10	67

Satisfaction with new houses

Most respondents (85%)[2] said that they were satisfied with their newly built house, whereas a small number of respondents said that they were dissatisfied (7%[3]) or neutral. Those in a completely or partially reconstructed house were more likely to express satisfaction compared to those living in a partially or completely repaired home (Figure 3.8).

2 Combinations of very satisfied (50%) and somewhat satisfied (35%).
3 Combinations of very dissatisfied (3%) and somewhat dissatisfied (4%)

Figure 3.8: Satisfaction with new or repaired houses – by where people were living (IRM-5, weighted, base=3,786)



Safety of reconstructed houses

Respondents who said they had fully built/repaired their house were further asked how safe they felt in their new or repaired house compared to the old house. The majority of respondents (81%) felt safer in their new or repaired house than their old house; 18 percent felt the new house was not safer than the old one.

Nearly everyone in a fully reconstructed house (97%) felt safer in the new house, as do high shares of people in a partially reconstructed house (89%), whereas 48 percent in a completely repaired house expressed the same opinion. Just 25 percent of those living in a partially repaired house felt safe in that home.

Use of reconstructed houses

Overall, 50 percent of people with earthquake-damaged houses had fully rebuilt/repaired their house and were living in it. Among the few respondents who mentioned that they had started or completed repairing/rebuilding their house but did not live in it (407 respondents), a vast majority (75%) said they were not using the house for any purpose at the time of the survey. Other uses included storage of grains or household items (19%), rent (3%), and keeping livestock (2%). Looking at the completion date of the new house, most people who said they were not using their new house for anything had completed the house only recently in 2019-20, so it seems likely that they had completed the house and were preparing to move in there to live in it soon.

Where did people rebuild?

A vast majority (80%) of those who had started or completed rebuilding their house had rebuilt on the original land. Responses suggested that people were unlikely to rebuild in other locations within the rural municipality/municipality or district (1% of respondents), but about two in ten respondents (19%) said they had rebuilt on their own land located elsewhere in the same ward. Those who did not build on the original land (769 respondents) were asked reasons for not rebuilding there. The most common reasons were because the original land was unsafe (51%), wanting to be closer to the road (45%), livelihood-related reasons (17%), and to be closer to relatives (12%).[4]

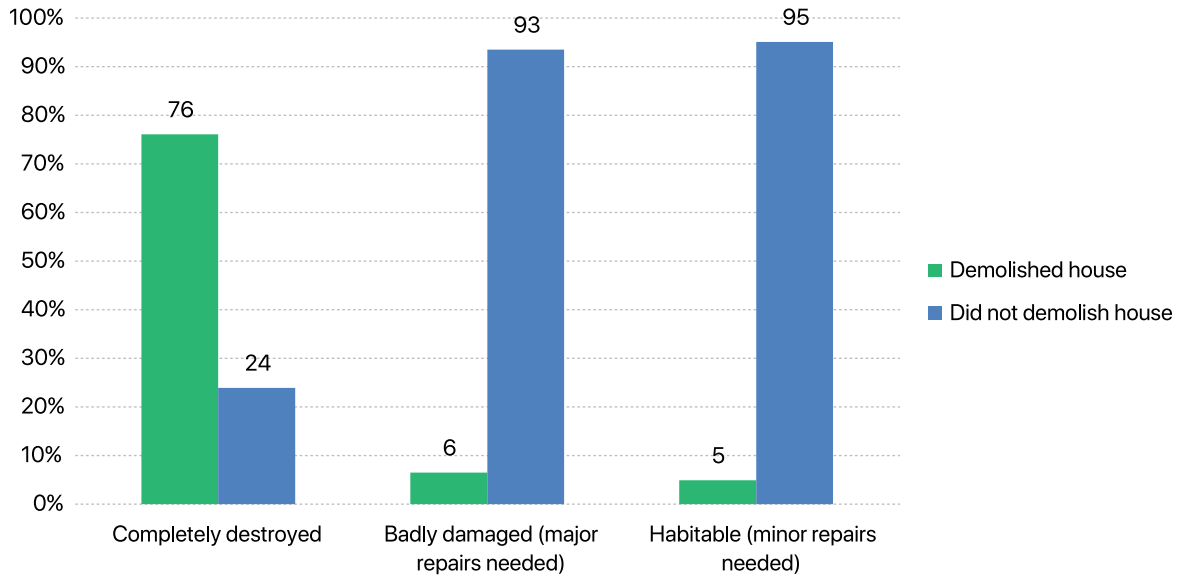
3.3 Old houses

Demolishing of earthquake-damaged houses

Among people who reported damage to their house, half said they had demolished their old house (50%) and the other half had not (50%).

Demolishing by damage levels: Among those who said their house was completely destroyed, 76 percent had demolished their old house, whereas nearly all who had sustained major or minor damages had not demolished the house. This shows that those with partial damage were much less likely to demolish their house.

Figure 3.9: Demolishing of house – by damage levels



Demolishing by status of housing recovery: Of the people who had finished reconstructing their house, 79 percent had demolished their old house. Out of those who were in the process of reconstructing their house, 72 percent had demolished their old houses. About 15 percent of those who said they had not yet started repairing or rebuilding their house had demolished their old house.

4 Multiple answers possible

Reasons for not demolishing

The main reason given for not demolishing a damaged house was that the house was still in use (55%). Three in ten mentioned high costs (32%). Few said that the house was only partially damaged (6%) and some had moved elsewhere (6%). Compared to others, higher shares of respondents in Syangja (77%), Lamjung (71%), and Gorkha (72%) mentioned that their house was still in use. Likewise, residents of Bhaktapur (49%), Kathmandu (37%), and Sindhupalchowk (40%) were more likely to say that they had not destroyed their damaged house because the demolishing costs were too high. People in urban areas were slightly more likely than those in rural areas to mention costs as a reason for not demolishing a damaged house (39% to 28%). On the other hand, more residents in rural areas said they were still using the damaged house, so did not demolish it (59% to 49%).

Use of old house

When asked further about use of the old house, for those who said they had not demolished it because it was still in use (2141 respondents), a vast majority said they were still using it to live/sleep in (85%) or were storing grains and household items (66%). Others mentioned using the damaged house for livestock (11%), as a shop (5%), or a kitchen (2%). Respondents whose houses were completely destroyed were more likely to use their old house for storage (73%), while those with major (92%) or minor damages (99%) were using the old house to live/sleep in.

3.4 Reconstruction Costs and Materials Used

All respondents who had completed reconstruction of their house or were in the process of repairing/rebuilding the damaged house were asked about the cost required for it.

Cost of Housing Reconstruction

For those who had already completed rebuilding or repairing, the average cost reported was NPR 1,196,887 (USD 10,069). For those respondents who said they were in the process of repairing/rebuilding, the average cost so far was NPR 1,036,324 (USD 8,718). Those who had not yet started to rebuild/repair thought that it would cost an average of NPR 1,448,025 (USD 12,181) to rebuild/repair their house.

The average cost of repairing/rebuilding increased with the number of rooms in the house. The average cost of repairing/rebuilding a one-room house was NPR 450,513 (USD 3,790), whereas the average cost of repairing/rebuilding a house with four rooms or more was NPR 1,756,055 (USD 14,773). Those who had used locally available resources for rebuilding/repairing reported lower costs (NPR 904,410/USD 7,608) compared to those who had not used locally available resources/materials (NPR 1,570,159/USD 13,209).

Table 3.3: Average cost of housing recovery – by status of housing recovery, number of rooms, and use of available materials (those who reported housing damages and had started or completed to rebuild/repair, IRM-5, weighted, base=4,301)

		Average cost in NPR
Status of housing recovery	Not yet started to rebuild/repair	1,448,025
	Fully rebuilt/repaired house	1,196,887
	Started to rebuild/repair house	1,036,324
Number of rooms	1 room	450,013
	2 rooms	688,209
	3 rooms	951,514
	4 or more rooms	1,756,055
Use of locally available resources/materials	Yes	904,410
	No	1,570,159
Use of resources/materials not available locally	Yes	1,164,482
	No	976,616

The reported average cost of repairing/rebuilding also differed by district and areas of settlement.

Residents of Kathmandu, Bhaktapur, and urban areas reported comparatively higher costs than other places. The average cost of repairing/rebuilding decreased with remoteness of respondents' residence. Those who were in less remote areas (remoteness of the ward from district headquarters) were more likely to report higher costs than those who were in more remote areas (NRs.1,681,158/ USD 14,143 for less remote vs. NRs. 734,675/ USD 6,180 for more remote areas). One reason could be greater availability of local materials in more remote areas, as 86 percent of those who rebuilt/ repaired their houses in more remote areas said they used locally available resources, compared to just 40 percent in less remote areas.

Materials used in reconstruction

Those who had repaired/rebuilt or were in the process of doing so were asked about the type of resources they used and whether they were locally available materials (Table 3.3). They were also asked about the costs of these materials. Respondents were asked to estimate costs if some materials were not brought directly from the market or if they could not remember particular costs.

Six in ten respondents (60%) said they used locally available resources for repairing/rebuilding, whereas three in four (77%) said that they used resources not locally available.

The most commonly used local resources were stone/sand (80%), wood/timber (72%), and labor (72%). Other locally available resources mentioned were mud (38%), bricks (16%), and bamboo (14%).

Table 3.4: Costs of local materials used in reconstruction (among those who reported housing damage and had started or completed to rebuild/repair, IRM-5, weighted, base=4,301)

Types of locally available resources	Shares who used these materials %	Average costs in NPR
Wood/timber	72	98,266
Mud	38	28,372
Bamboo	14	19,604
Stone/Sand	80	126,969
Bricks	16	278,321
Labor	72	201,171

Respondents who reported they had used locally available resources for repairing/ rebuilding were asked about the source of the local resources. The sources could be themselves, local governments, I/NGOs, their community, community forest, or user groups. For most materials, the respondents themselves had obtained the building materials; in the case of wood/timber, a very small share (12%) said they got it from a community forest.

The most commonly used non-local products for repairing/rebuilding were cement (94%), rods (74%), and nails (65%). CGI/galvanized sheets (56%), stone/sand (45%), bricks (40%), and labor (39%) were other materials mentioned. The average cost of these materials is shown below (Table 3.5).

Table 3.5: Costs of non-local materials used in reconstruction (among those who reported housing damage and had started or completed to rebuild/repair, IRM-5, weighted, base=4,301)

Types of materials not available locally	Shares who used these materials %	Average costs in NPR
Wood/timber	13	266,695
Mud	1	86,657
Bamboo	4	39,074
Stone/Sand	45	188,654
Bricks	40	238,670
Labor	39	256,790
Cement	94	158,971
Rod	74	181,044
Nails	65	18,333
CGI/galvanized sheet	56	53,111

As with locally available materials, respondents mentioned that they themselves had sourced materials that were not available locally.

Generally, the costs for the same material was cheaper if it was locally available. Wood/timber, mud, and bamboo were particularly cheaper when locally available. Bricks were slightly cheaper when locally unavailable.

Table 3.6: Cost comparison between locally available and locally unavailable resources in NPR (among those who reported housing damage and had started or completed to rebuild/repair, IRM-5, weighted, base=4,301)

Types of resources	Locally available	Locally unavailable
Wood/timber	98,266	266,695
Mud	28,372	86,657
Bamboo	19,604	39,074
Stone/sand	126,969	188,654
Bricks	278,321	238,670
Labor	201,171	256,790

3.5 Assistance received for reconstruction

This section presents information pertaining to types of assistance people received in the process of reconstruction as well as the sources of support and people's satisfaction with this assistance.

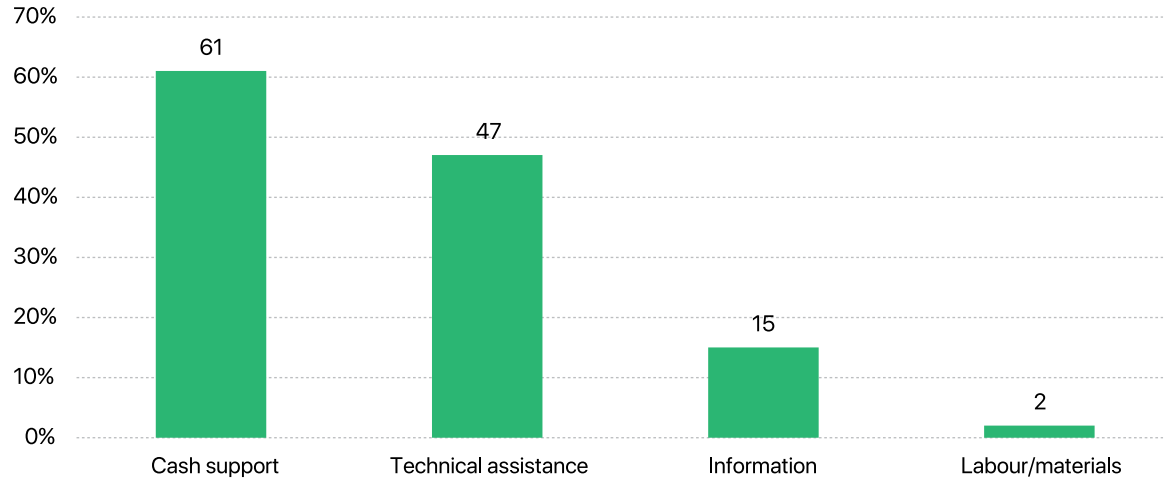
Types of assistance received for housing reconstruction

Respondents who said they had either fully rebuilt/repaired, or were in the process of rebuilding/repairing their house were further asked what types of assistance they had received. Multiple responses were allowed. Among those who were in the process of or had completed rebuilding/repairing, 61 percent said they had received cash support[5], 47 percent had received technical assistance, 15 percent got information on rebuilding/repairing, and two percent got labor or materials. Some 33 percent said they received no reconstruction support (Figure 3.10).

Of those who received cash support, 95% got the housing reconstruction grant, while seven percent received other forms of cash support. Of those receiving technical assistance, 99% received help in the form of engineers, 11% received masonry training, nine percent accessed social mobilizers, eight percent accessed technical support centres or community reconstruction centres, and two percent accessed mobile technical support. Those who accessed information, primarily received information on the housing grant reconstruction process (92%), on access to the government housing grant tranches (60%), and information on approved housing designs. Only two percent received information on retrofitting options and the retrofitting grant. People received labor or material support in the form of masons or other labor (68%), labor sharing (53%), local construction materials (29%), or provision of non-local construction materials (14%).

5 See Chapter 4 for more information on access to the housing reconstruction grant and Chapter 5 for information on the retrofitting grant.

Figure 3.10: Types of assistance received for housing recovery (IRM-5, weighted, base=3,820)



Respondents who mentioned receiving these types of assistance were further asked who they had received the assistance from. Multiple responses were allowed. Among those who received cash, most said they got it from the local (50%) or federal (43%) government. Those who got technical support got it from the local government (45%), engineers, and the federal government (30% each). People received information from community/neighbors (53%), engineers (49%), local government (41%), and family and friends (33%).

Usefulness of assistance to rebuild or repair the house

Those who said they received assistance in the process of repairing/rebuilding their house were further asked what types of assistance were most useful and crucial to them in their effort to rebuild/repair. Most thought that cash support (84%) was the most useful assistance, followed by technical support (57%). Fewer mentioned information (14%) or labor and materials (5%) as useful in the reconstruction process. Technical support was cited less by those residing in districts that had less earthquake damages. Those with lower incomes were less likely than those with higher incomes to find cash support useful. Those with lower incomes felt information and technical support were more useful forms of assistance.

Table 3.7: Types of assistance considered most useful for housing recovery – by district impact, rural/urban, remoteness, and income (among those who had rebuilt/repaired house and had received assistance, IRM-5, weighted, base=2,558)

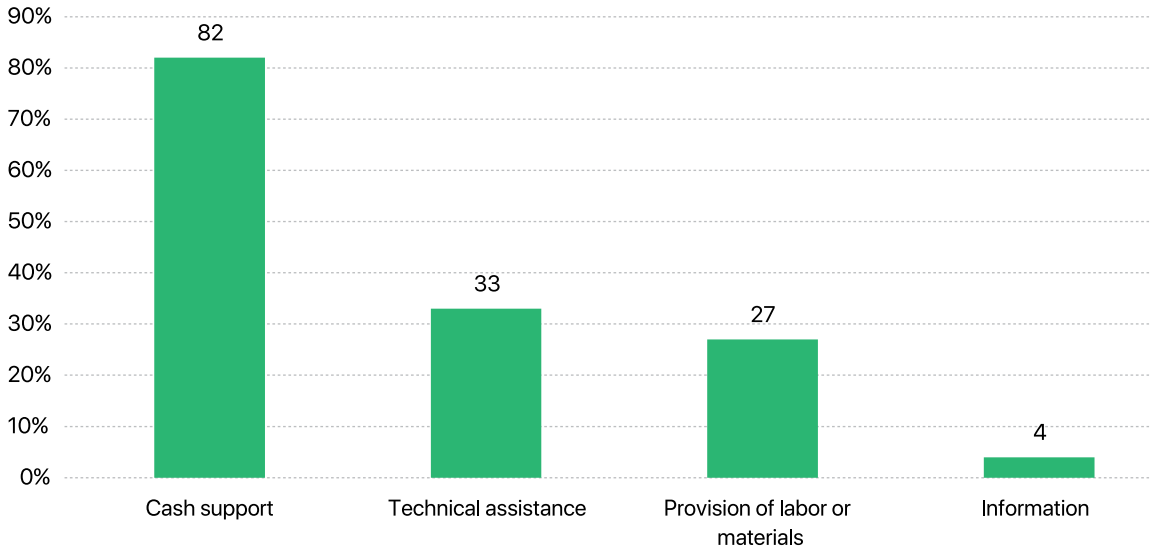
		Technical assistance	Provision of labor or materials	Cash support	Information
		%	%	%	%
Overall		***57***	***5***	***84***	***14***
District impact	**Severely hit**	**68**	**7**	**81**	**18**
	Crisis hit	**34**	**2**	**92**	**4**
	Hit with heavy losses	**67**	**2**	**85**	**4**
	Hit	**11**	**5**	**64**	**30**
Rural/urban	Rural	60	5	83	14
	Urban	33	3	90	8
Remoteness	Less remote	40	3	86	12
	Remote	60	6	84	13
	More remote	69	5	76	18
Income	Low	66	6	77	20
	Medium	59	6	86	13
	High	48	4	87	9

Assistance needs of those who have not yet completed housing recovery

Respondents who said they had not rebuilt or had partially rebuilt their house were asked what types of assistance they needed now to help them finish rebuilding their house. Multiple responses were allowed.

The majority of respondents (82%) who had not started rebuilding or were in the process of rebuilding said that they needed cash support to finish/start rebuilding. Similarly, technical support (33%), provision of labor or materials (27%), and information (4%) were other forms of assistance that respondents said they needed to finish/start rebuilding their house. There was little variation in responses across different demographic or geographical parameters.

Figure 3.11: Types of assistance that would help people to finish housing recovery (for those who have not yet completed rebuilding/repairing, IRM-5, weighted, base=570)



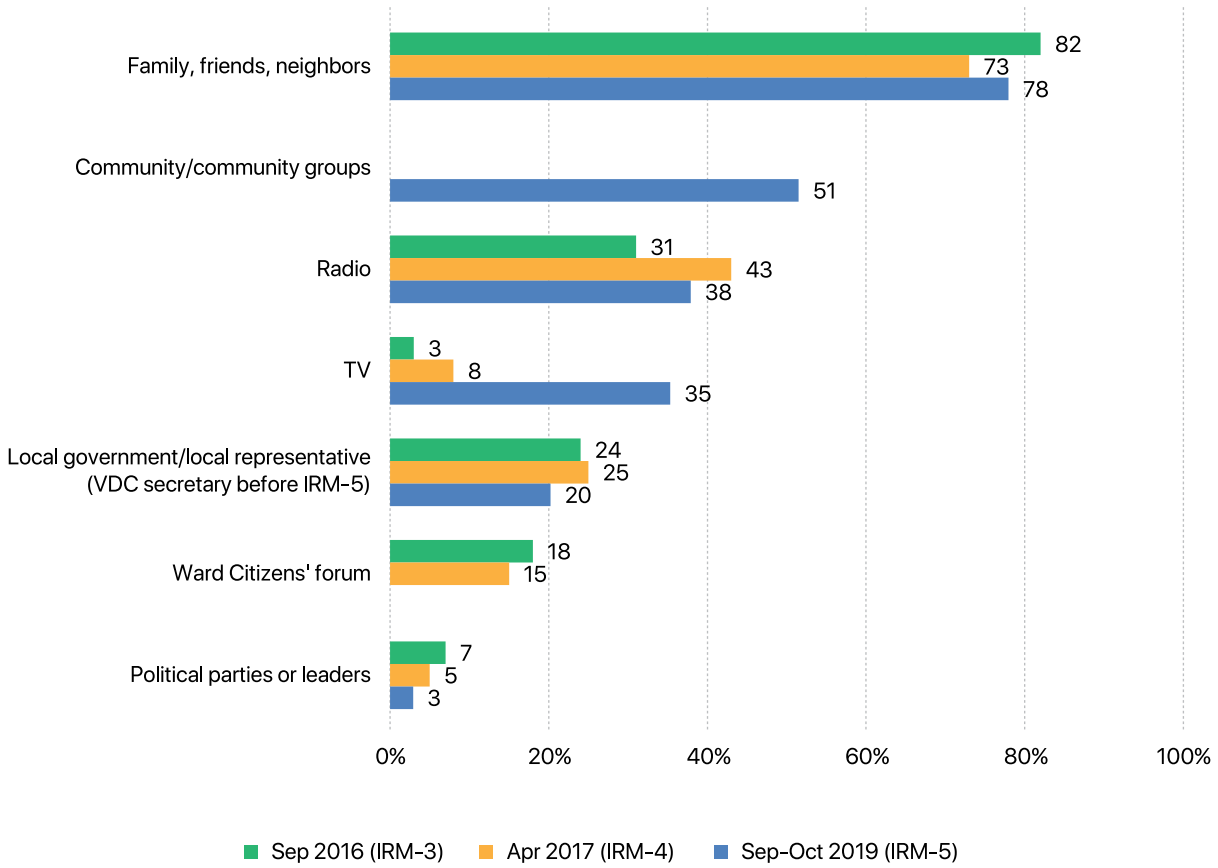
3.6 Access to information on reconstruction

All of the respondents were asked from where they got their information on reconstruction. Respondents were allowed to mention more than one response.

Respondents overwhelmingly said family, friends, and neighbors (78%) were their first source of information on reconstruction. Other common sources of information included community/community groups (51%), radio (38%), and television (35%). Fewer respondents mentioned government, either the local (20%) or central level (2%), or newspapers (13%) and pamphlets/posters/public notices (4%) (Figure 3.12).

Family, friends, and neighbors were the top information source since IRM-3, when this question was asked for the first time. VDC secretary was the second most common source of information on reconstruction in previous surveys (about 4 in 10 mentioned it), but fewer mentioned the equivalent local government/local representatives in IRM-5. The share who mentioned television had increased the most in IRM-5, up from just eight percent in IRM-4 to 35 percent in IRM-5. The share who mentioned radio had increased over time (30% to 38%). Community/community groups were not commonly mentioned, but instead, Ward Citizens' Forum used to be a top five information source.

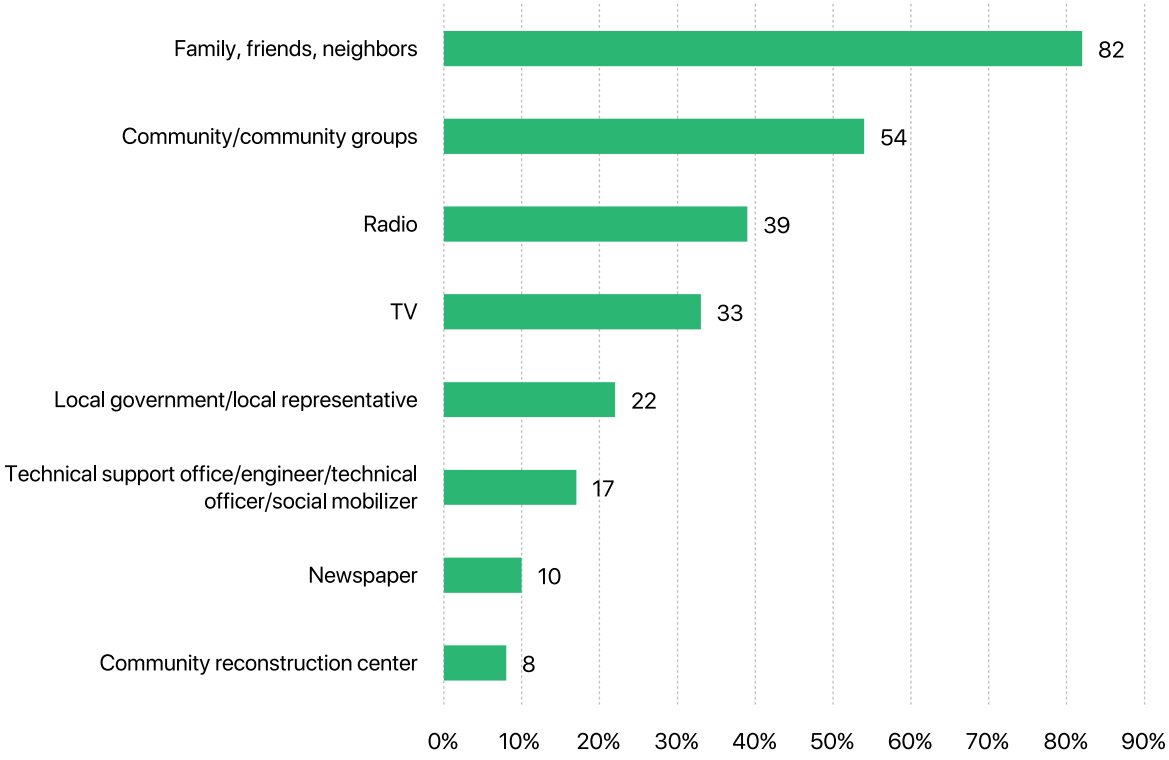
Figure 3.12: Sources of information on reconstruction (IRM-3 base=4855, IRM-4 base=4,854, IRM-5 base=5,857, weighted)[6]



Findings on most common information sources were similar among those with some housing damage. Eight in 10 said they got information on reconstruction from family, friends, and neighbors (82%), half from community/community groups (54%), four in 10 from the radio (39%), and one-third from TV (33%). Few mentioned local government/representative (22%), technical support officers (17%), the newspaper (10%), or community reconstruction center (8%).

6 In IRM-3 and IRM-4 question was worded as source of information on aid, in IRM-5 question was worded as source of information on reconstruction to accurately reflect the stage of recovery

Figure 3.13: Top sources of information on reconstruction among those with housing damages (IRM-5, weighted, base=4,832)



Enumerators asked respondents a hypothetical question about their perceived ability to communicate with the NRA to obtain information or make a complaint, if needed. More than half (55%) of respondents said that communication with an NRA official would be good if they had to approach them, 29 percent said it would be okay, whereas 14 percent said that communication with an NRA official would be difficult. Those in more remote and rural areas were more likely to believe that communication with NRA officials would be good, compared to people in less remote and urban areas.

Table 3.9: Ease of communication with NRA officials – by district impact, district, urban/rural, remoteness (IRM-5, weighted, base-5,857)

		Communication would be good	Communication would be okay	Communication would be bad
		%	%	%
Overall		***55***	***29***	***14***
District impact and district	**Severely hit**	**57**	**27**	**14**
	Dhading	49	36	12
	Gorkha	57	25	16
	Nuwakot	73	17	10
	Ramechhap	68	21	9
	Sindhupalchowk	44	34	22
	Crisis hit	**47**	**31**	**17**
	Bhaktapur	62	34	3
	Kathmandu	43	32	19
	Okhaldhunga	71	15	13
	Hit with heavy losses	**46**	**31**	**19**
	Solukhumbu	23	31	36
	Lamjung	59	31	10
	Hit	**13**	**77**	**9**
	Syangja	13	77	9
Rural/urban	Rural	52	33	13
	Urban	39	33	21
Remoteness	Less remote	42	34	18
	Remote	51	34	13
	More remote	61	16	22

Respondents in the low-income bracket and those with lower levels of education were slightly more likely to say that communicating with NRA officials would be difficult. There was almost no variation in responses across respondents who reported having received first, second, or third tranches of the NRA grant.

Respondents were also asked if they felt they could communicate with technical officers/engineers to receive information or make a complaint. Similar to approaching NRA officials, most of respondents responded that if they were to approach technical officers or engineers to receive some information or to file a complaint, communication would be smooth: 54 percent said that communication with technical officers/engineers would be good, 32 percent said it would be okay, and 12 percent said it would be bad.

Those with lower levels of education were more likely to say it would be difficult to communicate with technical officers or engineers. Again, those in rural areas were more likely than people in urban areas to believe that communicating with technical officers and engineers would be easy and that the communication would be good. Responses were similar among those who received the various tranches of the NRA reconstruction grant.

Chapter 4
Administration of the housing reconstruction grant

Photo: Manasi Prasai (Barpak, Gorkha)

This chapter focuses on the NPR 300,000 housing reconstruction grants which have been the primary form of support provided to earthquake-affected households that suffered major housing damages.[1] Chapter 5 discusses the NPR 100,000 housing retrofitting grant provided to those with partial damages. Most people enlisted in the housing grants scheme have been declared eligible for the housing reconstruction grant, while fewer are eligible for retrofitting support.[2]

This chapter first examines the official damage assessments conducted to assess housing damages and enlist eligible beneficiaries for the housing grant scheme. It then looks at eligibility for and ease of access to the housing reconstruction grant, as well as at reasons why some people have not received it or struggled to access the grant which is disbursed in three installments (tranches), conditional upon rebuilding progress according to approved building guidelines for earthquake-resilient housing.[3] The chapter concludes with a discussion of the grievance process put in place to allow those wrongly missed out from the housing grant scheme to file a complaint and go through a review and reassessment process.

Key findings

Official damage assessment

- Three in four people in earthquake affected areas were aware of the official damage assessment team visiting their house. People in severely affected districts, rural areas, and more remote areas were the most likely to say a damage assessment team visited. Nearly everyone who said their house was completely damaged said a team visited, as did majorities of those who said their houses had major or minor damage.

1 The grants are provided by the Nepal government with donor support through the Nepal Earthquake Housing Reconstruction Program: https://www.nepalhousingreconstruction.org/ The National Reconstruction Authority (NRA) administers the grants: http://www.nra.gov.np/en

2 As of October 2020, 834,011 households were eligible for the housing reconstruction grant, while 77,325 were eligible for the retrofitting grant. http://www.nra.gov.np/en (accessed on 14 October 2020).

3 First tranche: NPR 50,000. Second tranche: NPR 150,000. And third tranche: NPR 100,000.

- Satisfaction with the damage assessment was higher than in previous surveys.
- Official damage assessment matched self-reported damage levels. Nearly all respondents who said their house was completely destroyed said their house was officially categorized as being fully damaged. Responses for other damage categories also matched.

Distribution of the grant

- Nearly everyone who said their house was completely destroyed said they were declared eligible to receive the GoN housing reconstruction grant. Out of the 33 percent of the assessed households declared ineligible for the grant, 68 percent thought they should have been eligible for the grant.
- The housing grant positively impacted the reconstruction process. Among those who fully rebuilt/repaired their house, 69 percent had gotten all three tranches, 76 percent the second tranche, and 83 percent at least the first tranche.
- Those who received the housing grant rated the process as being easy. The share who said the process was 'very easy' increased with each subsequent tranche. Compared to previous survey rounds, the share who were 'very confident' in receiving all three tranches of the housing grant was highest in IRM-5.
- Similar shares across various areas had received the first tranche of the housing reconstruction grant, but some groups were more likely to have received the second and third tranches. People who got the final two tranches of the grant were more likely to be from severely hit districts and reside in rural and more remote areas. Their houses were also assessed as being fully damaged.
- Much of the grant was disbursed in 2017/2018—mostly the second tranche, but also some of the first and third tranches.

Use of the grant

- Among those declared eligible for the grant, three in four used or planned to use it to build a house following GoN building guidelines. This was a marked change from previous IRM surveys where fewer people mentioned using the grant money to build a house, and more people said they would use it to repair or retrofit their house, or to support their livelihood.
- In 2019, more people thought the housing grant would cover between 25-50 percent of total costs than they did in previous IRM years. Far fewer said that the grant would cover less than 25 percent of the total costs.

Obstacles to accessing the grant

- Inability to meet the demands of the grant was the main reason for not getting the grant, despite being eligible for it. While not being able to meet the grant demands was given as the reason for not getting any of the three tranches, it was more of an issue for getting the second tranche. Awareness of the grant requirements was very high, with 85 percent saying they knew what the requirements were.

- Problems related to individuals made getting the first tranche difficult, while issues accessing the second and third tranches were more system related. Delays from the bank or local government office were mentioned as a reason for difficulty in accessing the second and third tranches. Not having an understanding of the rules or not having documentation was more of an issue related to the first tranche.

Grievances

- About three in ten people declared ineligible for the housing grant filed an official grievance in order to be reconsidered for the beneficiary list, but only eight percent of those who filed a grievance said their grievance was approved and they received the housing grant. Forty-five percent said they did not know what happened to their grievance. People whose houses were assessed as fully damaged were more likely to file a grievance.

- The role of local government appeared prominent in the grievance filing process. Two in three among those who filed a grievance said their case was processed by local government and nearly four in ten said that a local government official/representative helped them file the grievance.

4.1 Damage Assessments

The National Reconstruction Authority (NRA) collected damage estimates to identify reconstruction grant beneficiaries. The damage assessment was conducted by the Central Bureau of Statistics (CBS). The assessment team consisted of engineers and enumerators who surveyed earthquake affected areas to collect information on demographics and housing damage between November 2015 and June 2016. They later re-surveyed to re-verify beneficiaries—a process that was still ongoing at the time of research.[4] The NRA used the data to determine and disburse cash grants that were to aid either rebuilding or retrofitting, depending upon the severity of damage.

Who did the damage assessment team visit?

In IRM-5, three in four respondents said that a technical team had visited their house to officially assess damage; a quarter said no official assessment had been done. The share who reported that they had a damage assessment increased by 20 points since IRM-4 was conducted two years before.

Households with the most damage were the most likely to have reported a damage team assessment—92 percent of those who said their house was completely destroyed, 88 percent of those who said they had major damage, 62 percent of those who had minor damage, and 32 percent of those with no damage said that a technical team came to assess damage to their house. Nearly everyone in the severely hit district said a damage assessment team visited (92%). Fewer said so in the case of lesser impacted areas—62 percent in crisis hit districts, 81 percent in districts hit with heavy losses, and 59 percent in hit districts.

A higher than average share of respondents from Kathmandu (43%) and Syangja (36%) said that an official damage assessment team had not visited their house. Those in rural areas (85%) were far more likely than people in urban areas (55%) to say that an assessment team had visited. The likelihood of a damage assistance team having visited increased with remoteness.

4 The first phase of the assessment took place from November 2015 to March 2016 covering eleven earthquake districts. The second phase took place from April 2016 to June 2016 and covered the Kathmandu valley. The final phase involved random verification and addressing grievances (ongoing at the time of research). The assessment team visited all households in the severely hit districts as designated in the Post Disaster Needs Assessment (PDNA). In less affected areas, the teams verified damage levels in households that were identified previously by local bodies to have been earthquake affected.

Table 4.1: Shares of people whose house was assessed in the official damage assessment – by impact, district, remoteness, rural/urban (IRM-5, weighted, base=5,857)[5]

		Yes (%)	No (%)
Overall		***75***	***25***
District impact and district	**Severely hit**	**97**	**3**
	Dhading	93	6
	Gorkha	97	2
	Nuwakot	98	2
	Ramechhap	99	1
	Sindhupalchowk	98	2
	Crisis hit	**62**	**37**
	Bhaktapur	81	19
	Kathmandu	57	43
	Okhaldhunga	95	4
	Hit with heavy losses	**81**	**18**
	Solukhumbu	93	7
	Lamjung	74	25
	Hit	**59**	**36**
	Syangja	59	36
Rural/urban	Rural	85	14
	Urban	55	45
Remoteness	Less remote	59	41
	Remote	84	15
	More remote	92	7

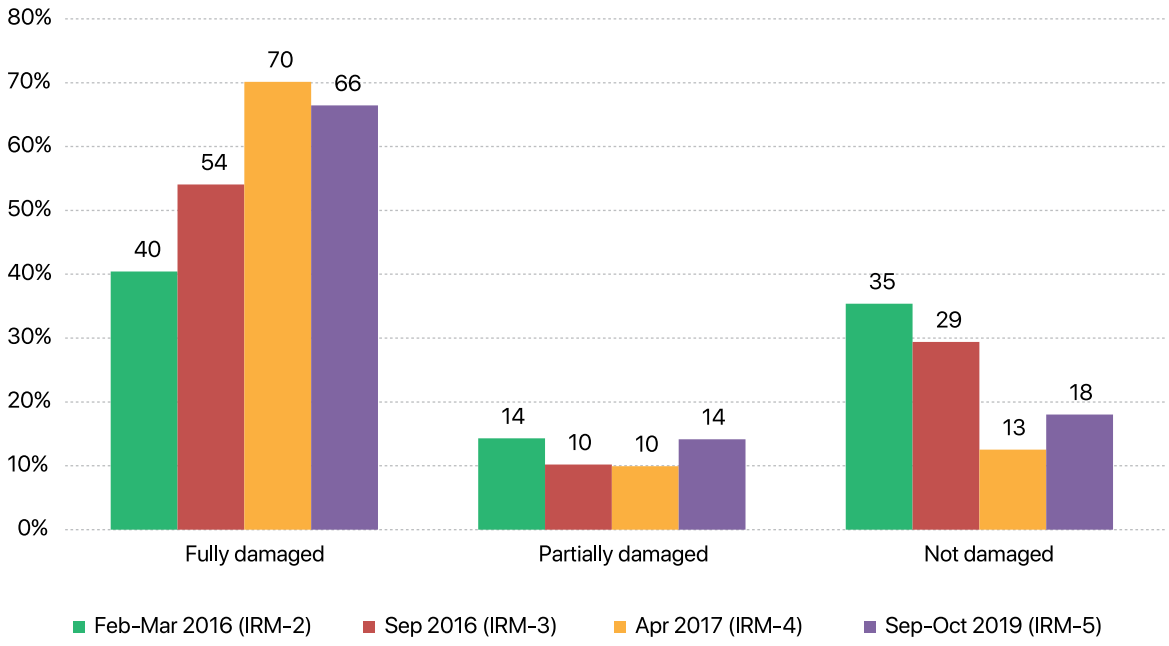
Results of the damage assessment

Among respondents who were assessed, 66 percent said their house was assessed as being 'fully damaged,' 14 percent as 'partially damaged,' and 18 percent as 'not damaged' in IRM-5.[6] Between late 2016 and early 2017, the share who said their house was assessed as fully damaged had increased, while those who said their house was assessed as not damaged had decreased – likely a result of increased awareness of and access to the housing grant scheme during this period. Changes in shares of houses in each damage category were likely due to the fact that households were continuously added or re-categorized over time as the result of the grievance process and re-assessments.

5 Answers are based on people's recollection of a damage assessment team visiting and assessing their house. Remaining shares were unsure or refused to answer.

6 The damage grades of 'fully damage', 'partially damaged' and 'not damaged' do not correspond to damage categorization employed by the CBS teams. Nevertheless, this survey continued to use these categorizations which were used by earlier rapid damage assessments (which used them with corresponding red, yellow and green labels) as people have widely continued using them when explaining how their house was assessed. Very few were aware of the official damage grade and verifying this would have involved checking their housing grant documents. Yet, people were generally aware whether their house was declared 'fully damaged' (meaning eligible for the NPR 300,000 housing reconstruction grant), 'partially damaged' (meaning eligible for the NPR 100,000 retrofitting grant), or 'not damaged' (meaning not eligible for any support).

Figure 4.1: Results of official damage assessment (IRM-2 base=4,468, IRM-3 base=4,855, IRM-4 base=4,854, IRM-5 base=4,369, weighted)[7]



As expected, higher shares of houses were assessed as being fully damaged in the severely hit districts. Nearly everyone in severely hit districts were classified as having fully damaged houses (91%), compared to about half of those who were assessed in the crisis hit and hit with heavy losses district, and two in ten in the hit districts. Those in rural and more remote areas were more likely to have been classified as having fully damaged houses.

7 ibid

Table 4.2: Results of official damage assessment – by district impact, district, rural/urban and remoteness (IRM-5, weighted, base=4,369)

		Fully damaged	Partially damaged	Not damaged
		%	%	%
Overall		***66***	***14***	***18***
District impact and district	**Severely hit**	**92**	**4**	**3**
	Dhading	89	9	2
	Gorkha	91	5	4
	Nuwakot	97	1	3
	Ramechhap	89	6	5
	Sindhupalchowk	96	2	1
	Crisis hit	**51**	**22**	**27**
	Bhaktapur	66	15	19
	Kathmandu	44	24	31
	Okhaldhunga	73	21	6
	Hit with heavy losses	**51**	**23**	**20**
	Solukhumbu	58	31	10
	Lamjung	46	18	27
	Hit	**21**	**14**	**62**
	Syangja	21	14	62
Urban/rural	Rural	75	10	13
	Urban	40	26	32
Remoteness	Less remote	49	22	28
	Remote	73	12	14
	More remote	83	7	9

Results of official damage assessment compared to self-reported damage levels

The results of the official damage assessment matched how people self-categorized their own house's damage. This was consistent in past IRM surveys as well. Among those who self-assessed their house as completely damaged, 97 percent were officially assessed as being fully damaged. Likewise, 91 percent of those who said their house was not damaged were assessed as having an undamaged house. Among those who said their house was badly damaged, 63 percent were officially classified as partially damaged and 29 percent as fully damaged. Among those who said their house would need minor repairs, 27 percent were assessed as partially damaged and 60 percent as not damaged.

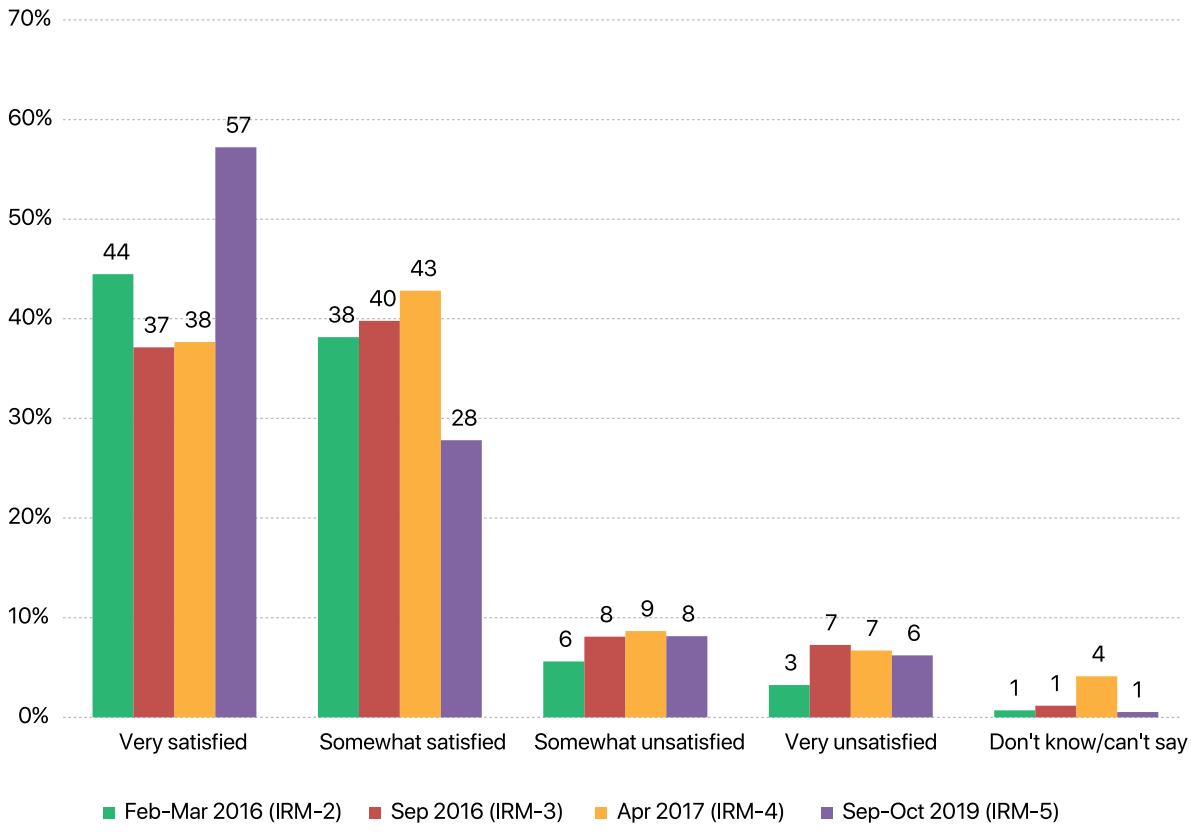
Table 4.3: Comparison between official assessment and self-assessment of housing damages (IRM-5, weighted, base=4,369)

		Official damage assessment		
		Fully damaged	Partially damaged	Not damaged
Reported housing damage	Completely damaged	97%	2%	1%
	Badly damaged (major repairs needed)	29%	63%	6%
	Habitable (minor repairs needed)	8%	27%	60%
	Not damaged	2%	6%	91%

Satisfaction with official damage assessment

Among those who said their house was assessed by the official damage assessment team, 85 percent were satisfied (57% very, 28% somewhat) and 14 percent were not satisfied (8% very, 6% somewhat) with the assessment. Across all IRM surveys, the share who said they were 'very satisfied' was highest in IRM-5. While people always expressed satisfaction with the assessment, the degree to which they were satisfied had grown by IRM-5.

Figure 4.2: Satisfaction with official damage assessment (IRM2 base=3,177, IRM-3 base=3,106, IRM-4 base=3,883, IRM-5 base=4,369, weighted)



4.2 Eligibility for the housing reconstruction grant

Housing reconstruction grants of NPR 300,000 (USD 2,561) were the primary form of support provided to earthquake-affected households that suffered significant housing damage.[8] This cash assistance was intended to boost 'owner-driven reconstruction' and was tied to the use of specific building codes in order to make homes earthquake safe. The objective was to ensure that houses destroyed in the most-affected districts of the country would be rebuilt using earthquake-safe building techniques through grants and technical assistance to eligible households from the GoN.

Who was declared eligible

Respondents who reported at least some level of housing damage and whose houses were officially assessed were asked whether they were declared eligible for the NPR. 300,000 housing reconstruction grant. Just over six in ten respondents whose houses were assessed said they were declared eligible to receive the grant. This was an increase from previous IRM rounds.

Eligibility by geography: More than double the share of respondents residing in urban areas (55%) than rural areas (25%) reported that they were not considered eligible for the housing reconstruction grant. The share declared eligible for the NPR 300,000 housing grant was relatively higher in severely hit districts (92%) compared to hit with heavy losses districts (59%) and crisis hit (50%) and hit (17%) districts. The proportion of people who said they were declared eligible was higher in Nuwakot (97%), Sindhupalchowk (96%), Ramechhap (90%), and Gorkha (90%). The proportion of those who reported damages and were officially declared eligible for the grant was relatively lower in Syangja (17%), Kathmandu (43%), and Lamjung (54%).

8 The grants are provided by the Nepal government with donor support through the Nepal Earthquake Housing Reconstruction Program: https://www.nepalhousingreconstruction.org/ The National Reconstruction Authority (NRA) administers the grants: http://www.nra.gov.np/en

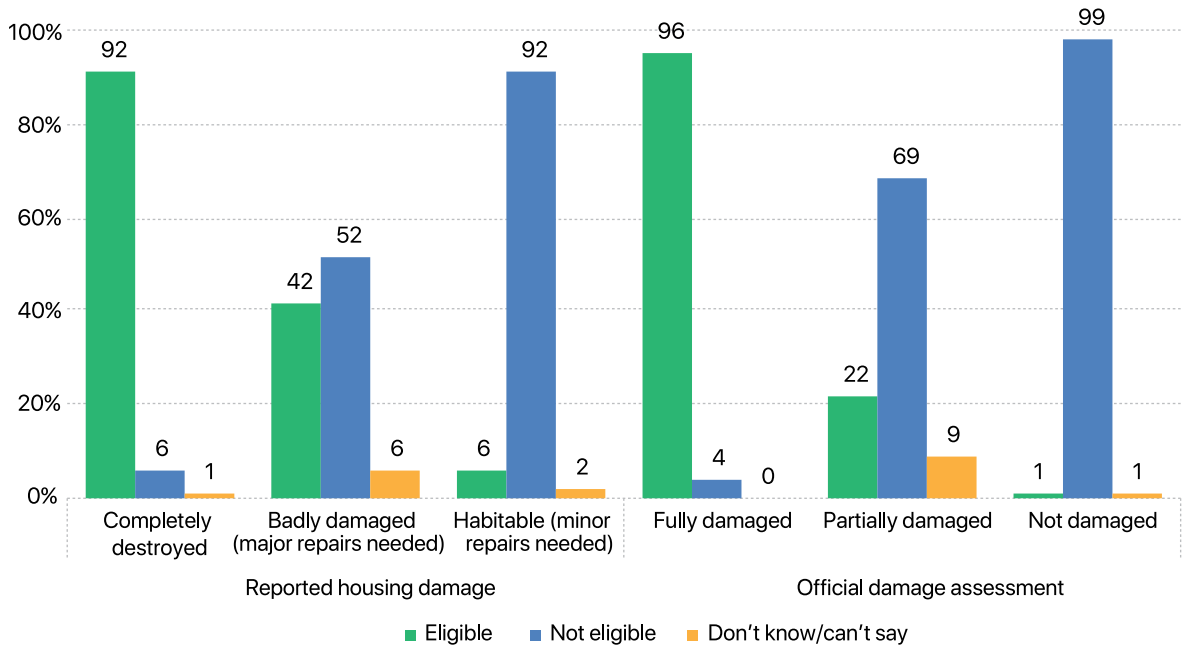
Table 4.4: Grant eligibility among those who were assessed by impact, district, urban/rural, remoteness, self-reported damage level, official damage assessment (IRM-5, weighted, base=4,369)[9]

		Eligible	Not eligible	Don't know/can't say
		%	%	%
Overall		***64***	***33***	***2***
District impact and district	**Severely hit**	**92**	**8**	**1**
	Dhading	86	12	2
	Gorkha	90	9	1
	Nuwakot	97	3	0
	Ramechhap	90	10	0
	Sindhupalchowk	96	3	1
	Crisis hit	**50**	**46**	**2**
	Bhaktapur	78	20	2
	Kathmandu	43	53	3
	Okhaldhunga	71	29	1
	Hit with heavy losses	**59**	**35**	**6**
	Solukhumbu	67	33	1
	Lamjung	54	36	11
	Hit	**17**	**82**	**1**
	Syangja	17	82	1
Rural/urban	Rural	73	25	2
	Urban	43	55	1

Eligibility by damage: Those with higher damage were more likely to be declared eligible. Based on self-assessed damage, 92 percent of those who said their house was completely damaged reported that they were declared eligible for the grant. Alternatively, 42 percent of respondents who said their house was badly damaged and required major repairs to be habitable, said that they were considered eligible. Around six percent of respondents who said their house was habitable, but needed minor repairs were declared eligible for the housing reconstruction grant. Based on the official damage assessment by the government, 96 percent of respondents whose houses were classified as fully damaged said they were declared eligible for the grant. Of those whose house was classified as partially damaged, 22 percent said they were considered eligible for the reconstruction grant – but many in this category were declared eligible for the retrofitting grant (see Chapter 5).

9 Remaining shares refused to answer.

Figure 4.3: Grant eligibility among those who were assessed – by reported damage level and official damage assessment (IRM-5, weighted, base=4,369)[10]



Who thought they were wrongly declared ineligible?

Those who were declared ineligible for the housing grant were asked if they believed they should have been eligible. Sixty-eight percent said they should have been eligible. This is an increase from previous rounds (IRM-4) when just 34 percent thought they should have been eligible. Those with lower incomes, widows, and Dalits were comparatively more likely to think they should have been eligible for the grant.

Ineligibility by geography: Eight in ten respondents in rural areas who were declared ineligible thought they should have been eligible, compared to only half in urban areas. Nine in ten respondents from severely hit districts who said they were not declared eligible believed they should have been. The proportion of people who said they were not declared eligible, but thought they should have been was low in Bhaktapur (37%) and Kathmandu (59%) districts compared to the other districts (Table 4.5).

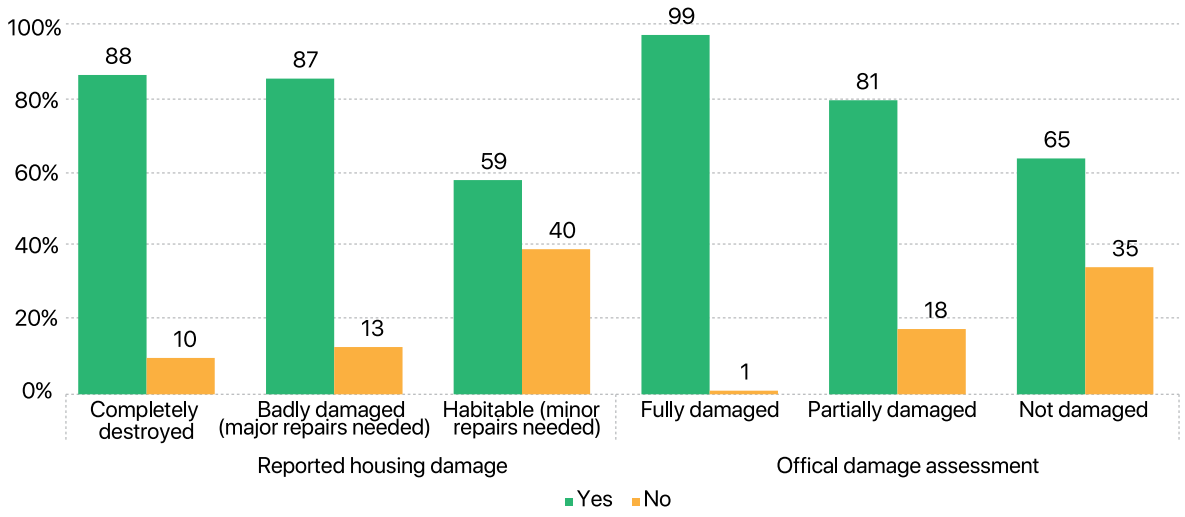
10 Asked only to those who reported some level of damages and whose house was assessed. Remaining shares refused to answer.

Table 4.5: Share of people who thought they should have been declared eligible for the housing reconstruction grant – by district impact, district, rural/urban, remoteness, caste/ethnicity (among those who were assessed but declared ineligible, IRM-5, weighted, base=1,604)

		Yes	No	Don't know/ can't say
Overall	***Overall***	***68***	***31***	***1***
District impact and district	**Severely hit**	**92**	**7**	**1**
	Dhading	93	7	0
	Gorkha	87	9	4
	Nuwakot	100	0	0
	Sindhupalchowk	90	10	0
	Ramechhap	91	7	2
	Crisis hit	**59**	**39**	**1**
	Bhaktapur	37	58	5
	Kathmandu	59	40	1
	Okhaldhunga	82	17	1
	Hit with heavy losses	**86**	**12**	**3**
District impact	Solukhumbu	80	17	3
	Lamjung	89	8	3
	Hit	**81**	**19**	**1**
	Syangja	81	19	1
Rural/urban	Rural	82	17	1
	Urban	51	47	1
Caste/ethnic group	Hill castes	71	28	1
	Hill ethnic groups	77	22	2
	Hill Dalit	87	11	2
	Newar	54	44	1

Ineligibility by damage: Nearly all of those with higher housing damage (both self-reported and official assessment) believed they should have been eligible, but large shares with partial or no damages also thought they were wrongly declared ineligible.

Figure 4.4: Share of people who thought they should have been declared eligible for the housing reconstruction grant – by reported damage and official damage assessment (among those who were assessed but declared ineligible, IRM-5, weighted, base=1,604)[11]



4.3 Receipt of grant tranches

The housing reconstruction grant was disbursed in three instalments (tranches) totaling NPR 300,000. Building regulations for each stage were stipulated, which had to be met to get each subsequent tranche of the housing grant. At the time of IRM-5, among those who were declared eligible to get the housing reconstruction grant, 89 percent had gotten the first tranche, 73 percent the second trance, and 64 percent the third tranche.

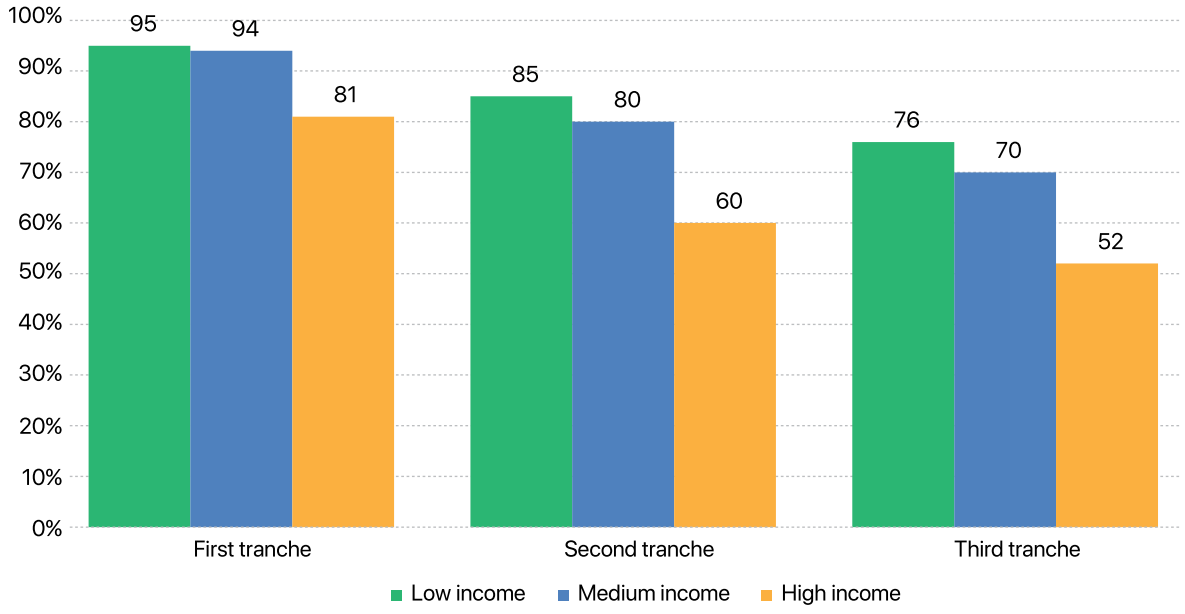
Eligible people in severely hit districts were the most likely to have received any of the three tranches of the housing grant. While majorities of eligible people in both rural and urban areas got the first tranche, those in rural areas were far more likely to have gotten the second and third installments. The same pattern was seen when looking at remoteness; higher shares of people in more remote areas received the three grant tranches compared to less remote areas (Table 4.6). The likelihood of receiving the second and third tranches also decreased with rise in income levels (Figure 4.5).

11 Asked only to those who reported some level of damages and whose house was assessed. Remaining shares were unsure or refused to answer.

Table 4.6: Receipt of grant tranches – by district impact, district, remoteness, urban/rural (for those declared eligible for grant, IRM-5, base=3,114, weighted)

		First tranche	Second tranche	Third tranche
		%	%	%
Overall		***89***	***73***	***64***
District impact and district	**Severely hit**	**97**	**94**	**84**
	Dhading	96	90	81
	Gorkha	96	93	87
	Nuwakot	98	96	82
	Sindhupalchowk	98	97	86
	Ramechhap	95	91	85
	Crisis hit	**79**	**46**	**41**
	Bhaktapur	90	42	39
	Kathmandu	73	40	34
	Okhaldhunga	93	88	81
	Hit with heavy losses	**85**	**66**	**44**
	Solukhumbu	90	80	52
	Lamjung	81	53	36
	Hit	**82**	**36**	**4**
	Syangja	82	36	4
Rural/urban	Rural	93	81	72
	Urban	73	38	31
Remoteness	Less remote	82	49	44
	Remote	92	81	71
	More remote	96	91	82

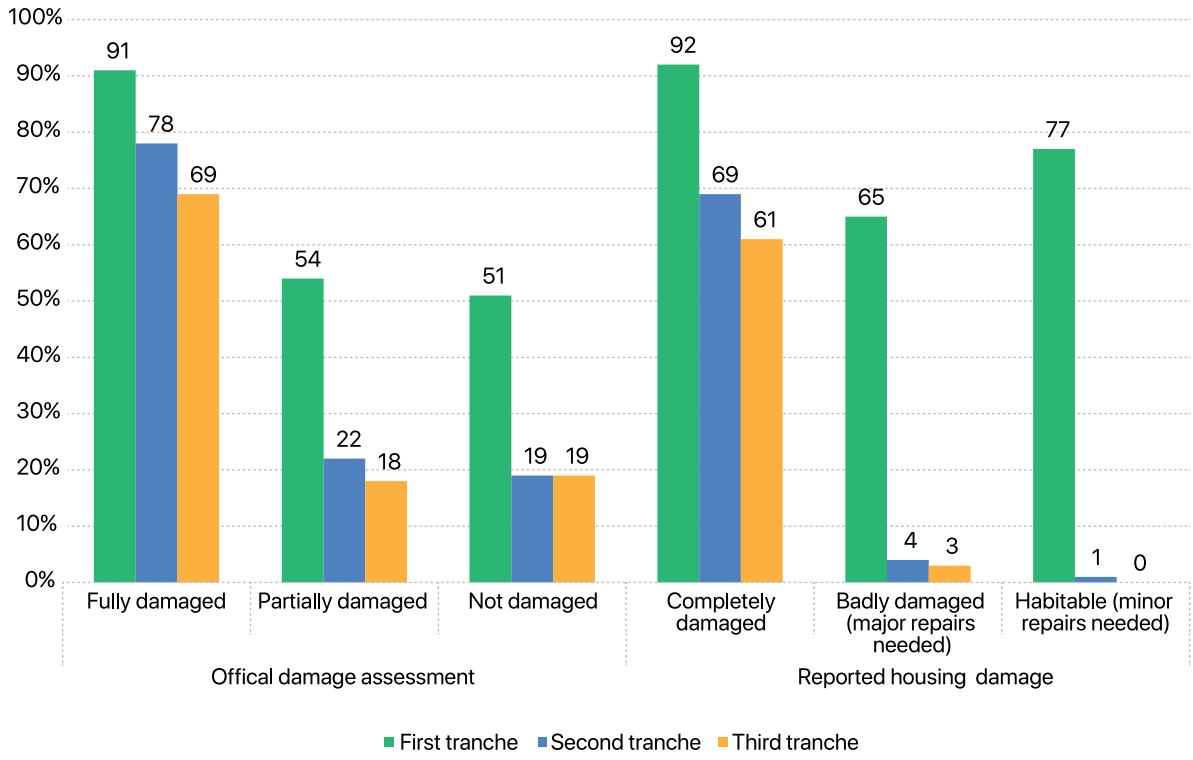
Figure 4.5: Receipt of grant tranches – by income (for those declared eligible for grant, IRM-5, base=3,114, weighted)



Damage: Nearly all who were assessed as having fully damaged houses got the first tranche (91%), and uptake was high for the second and third tranches as well. Among those who were assessed as having partially damaged or undamaged houses, half got the first tranche and about two in ten each got the second and third tranches (Figure 4.6). Similarly, those who self-reported having completely damaged houses were more likely to have received the first, second and third tranches than those who reported partial damages (badly damaged house or habitable house with minor damages) (Figure 4.6).

Progress in reconstruction: Receiving the NRA housing reconstruction grant positively impacted the reconstruction process. Among those who fully rebuilt/repaired their house, 69 percent had gotten all three tranches, 76 percent the second tranche, and 83 percent at least the first tranche. Among those who were in the process of rebuilding/repairing, 15 percent got all three tranches, 23 percent got the second, and 34 percent got the first tranche. In contrast, among those who had done nothing, only two percent got the third and second tranches, and just 22 percent said they got the first tranche.

Figure 4.6: Receipt of grant tranches – by official damage assessment and reported housing damage (for those declared eligible for grant, IRM-5, base=3,114, weighted)



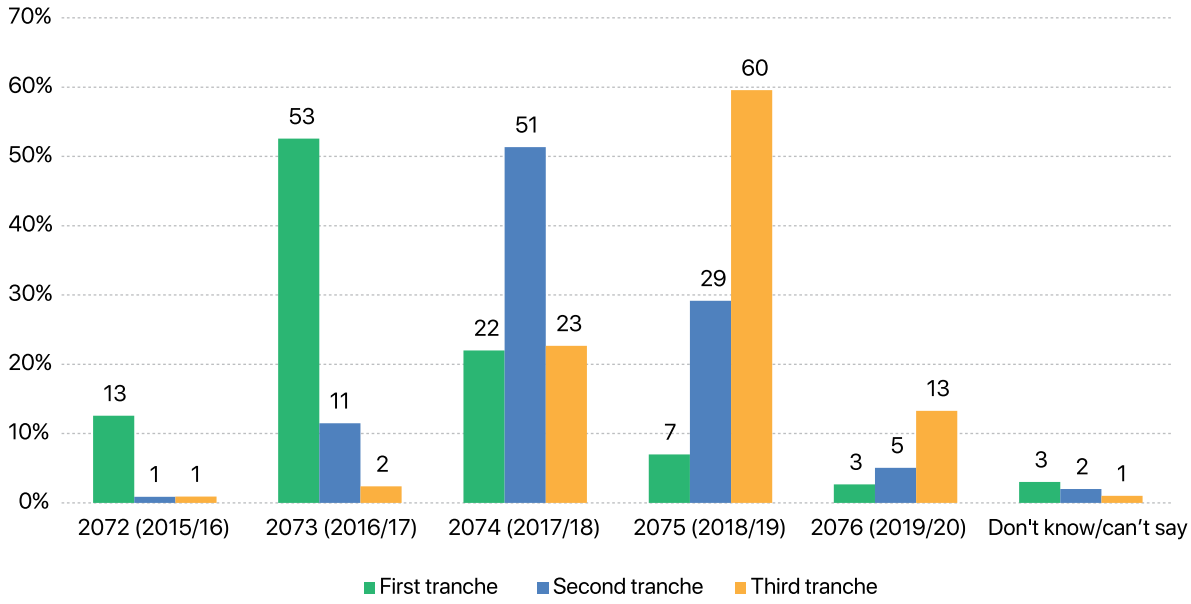
Timing of tranche receipt

Grant recipients were asked when they got the various tranches. The busiest years for grant disbursement were 2017/18[12] with a majority of second tranches received then, and two in ten recipients of the first and third tranche saying they got it in then as well. For the first tranche, people started getting it in 2015/16, but a majority of those who got the first tranche received it either in 2016/17 (53%) or

12 Nepali dates were used when asking this question. The Nepali year (Bikram Sambat=BS) runs from April to April: 2072 BS=2015/16 AD (April 2015 to April 2016), 2073 BS=2016/17 AD, 2074 BS=2017/18 AD, 2075 BS=2018/19 AD, 2076 BS=2019/2020.

2017/18 AD (22%). Recipients started getting the second tranche in 2016/17 (12%), though most of them got it in either 2017/18 (51%) or in 2018/19 (29%). For the third tranche, just over two in ten got it in 2017/18 (23%), six in ten in 2018/19 (60%), and a few in 2019-20 (13%). The timing of grant receipt also tracks with when people started and completed reconstruction work, an indication that the grants did have an impact on when people started reconstruction (See Chapter 3).

Figure 4.7: Timing of grant receipt (IRM-5, weighted, base=3,114)[13]



Reasons for not receiving any tranches, despite eligibility

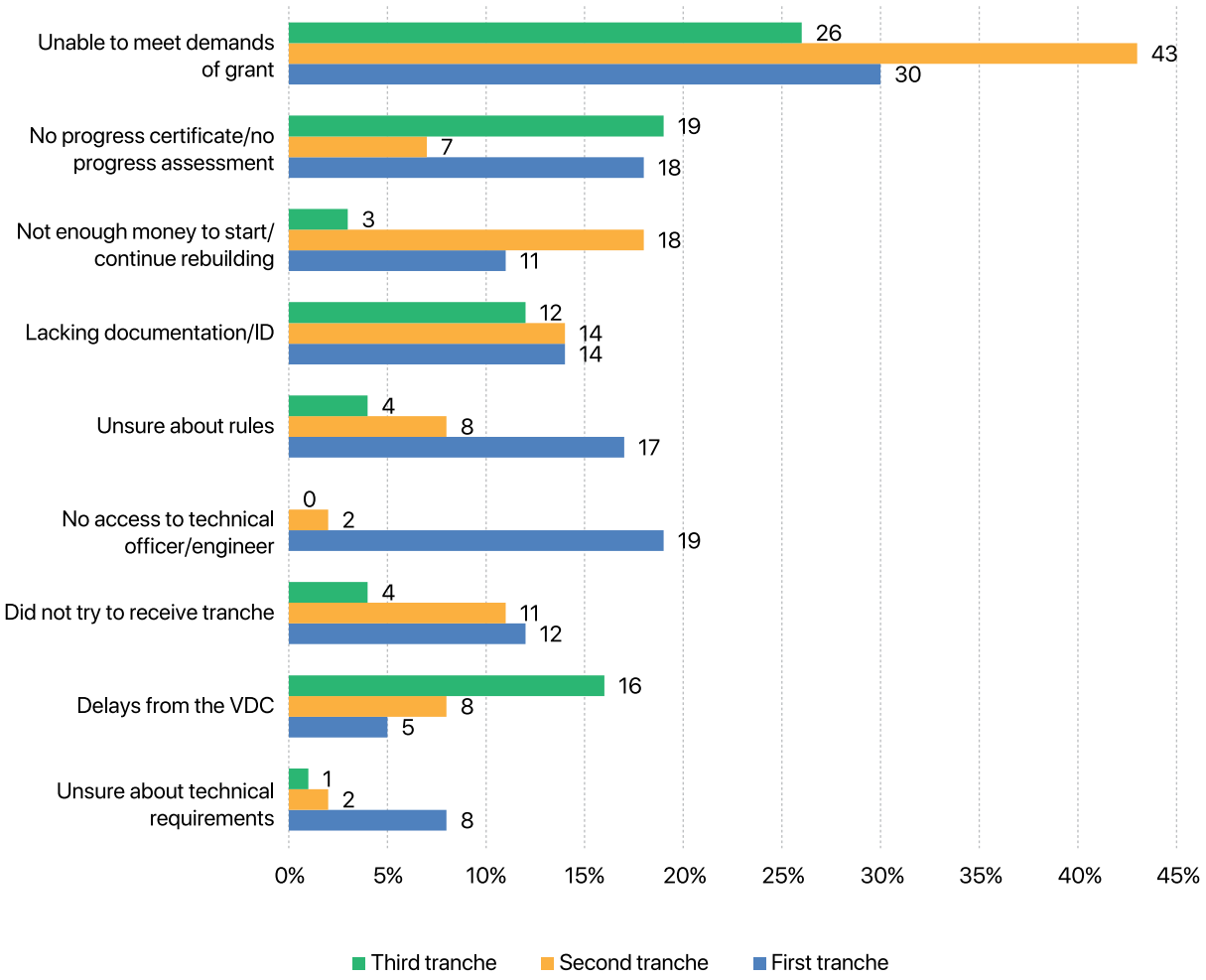
People who were declared eligible, but did not get the first tranche were asked for the reasons they did not get the grant. Similarly, those who got the first tranche, but no subsequent tranche, and those who got the first and second tranches, but not the third tranche were also asked why they did not get the tranches. The main reason cited by respondents was the inability to meet demands required to get the grants. This held true when asked separately about the first (30%), second (43%), or the third (26%) tranche.

The biggest barriers for getting the first tranche were inability to access technical assistance, such as technical officers/engineers (19%), inability to receive a progress certificate/no official visited to assess progress (18%), and not understanding the rules (17%). When it came to getting the second tranche, which was after certain degree of construction had already begun; the biggest barrier was the inability to meet the demands of the grant. Additionally, not having the necessary funds was an issue in getting the second tranche (18%)--more so than at any other point in the grant receipt process.

Reasons other than not meeting grant criteria for not receiving the third grant included the inability to get a progress certificate/no one came to assess (19%) and delays from the local office (16%). Once people started to get the second tranche, they most likely pursued the final tranche—very few people said that they did not try at all to get the third tranche.

13 Dates presented are Nepali dates as Nepali dates were used in asking the questions. The equivalent years in AD are as follows (April to April): 2073 BS-2016/17 AD, 2074 BS-2017/18 AD, 2075 BS-2018/19 AD

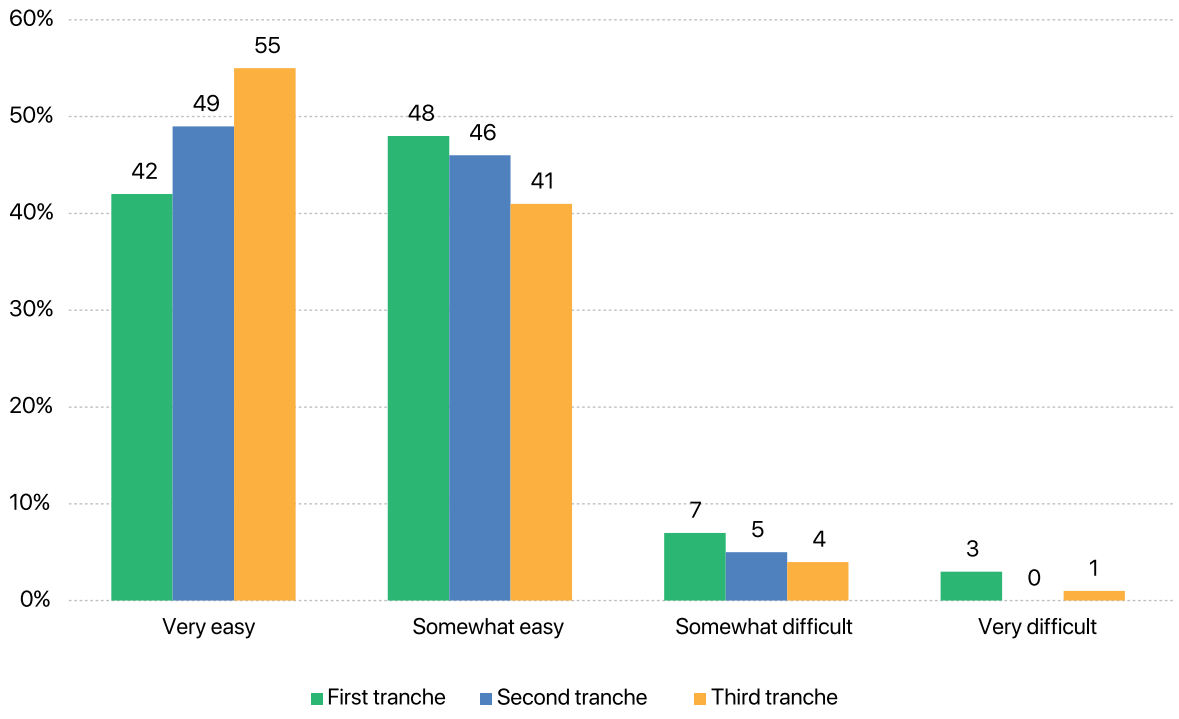
Figure 4.8: Reasons for not getting grant despite being eligible for it (IRM-5, weighted, 1st tranche base=338, 2nd tranche base=494, 3rd tranche base=284)



Ease of grant receipt

Those who received the various housing grant tranches were asked to rate the ease of getting each particular tranche. Nearly everyone (96%) said that it was easy to get grant tranches. However, the ease of getting the tranche increased for each subsequent tranche (Figure 4.9). It appears that over time and with experience with the grant process, it became easier for recipients to get grant installments. A very small share, particularly residents in Kathmandu, were more likely than others to find it difficult to get any of the grant tranches.

Figure 4.9: Ease of getting various tranches of the grant-among those who got the grant (IRM-5,weighted, 1st tranche base=2,775, 2nd tranche base=2,282, 3rd tranche base=1,998)



Problems faced when accessing the housing reconstruction grant

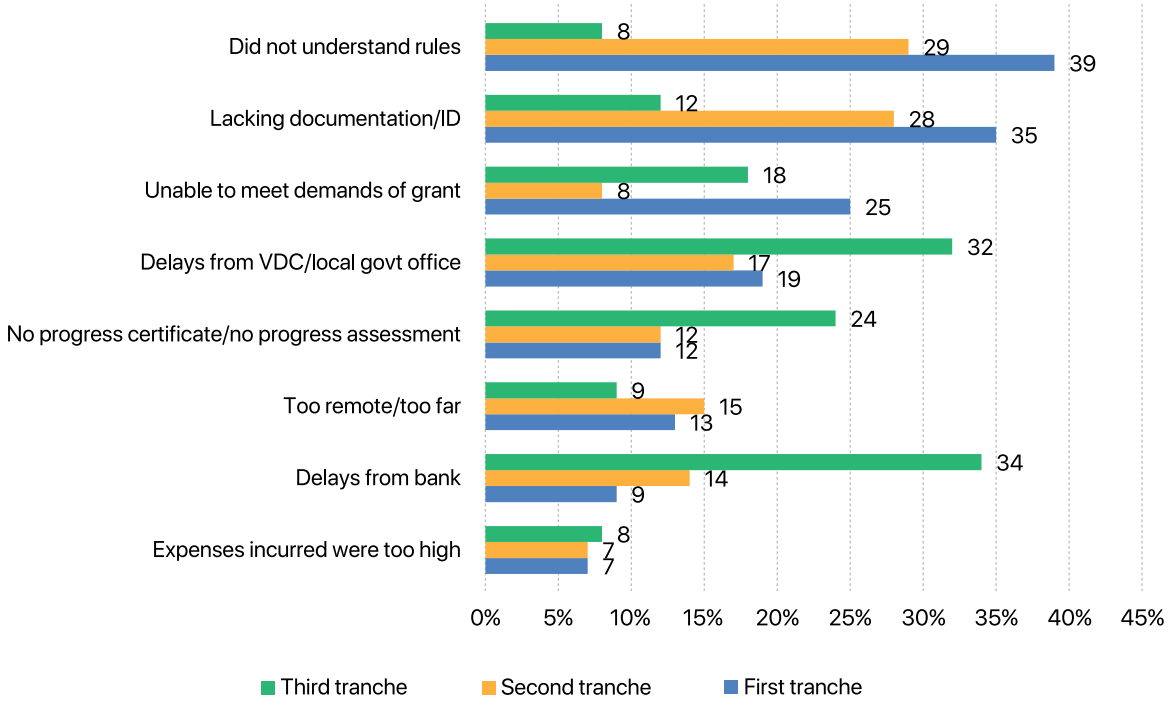
Grant recipients who were declared eligible, but found it difficult to receive the housing reconstruction grant were asked about the specific difficulties faced when getting each of the three grants. The most commonly cited difficulty was not understanding the rules (39%) and not having documentation (35%) to get the first tranche, followed closely by delays from the bank (34%) and delays from the VDC/local government office[14] (32%) to get the third tranche (Figure 4.10).

Issues related to individuals became less of a problem as people started getting subsequent tranches, but issues related to grant administration worsened. Difficulty in understanding the grant rules was a major issue in getting the first tranche, but decreased sharply when it came to getting the second (10 points) and third (21 points) tranches. A similar trend was seen for not having documentation and for people mentioning remoteness and distance as major issues.

The share who mentioned delays from the bank or the VDC/local government office for the third tranche was more than double the share who mentioned these difficulties for the first or second tranche. Similarly, the inability to obtain a progress certificate or have a technical officer visit to access progress was mentioned twice as often for the third tranche compared to the first or second tranche. Inability to meet grant conditions was more of an issue in getting the first and third tranche. Expenses incurred by accessing the grant (such as travel to banks) were mentioned at similar levels for all three tranches.

14 At the time distribution happened via VDCs, VDC's helped with documentation and therefore delays in VDC/local government office processing could mean delays in receiving the grant.

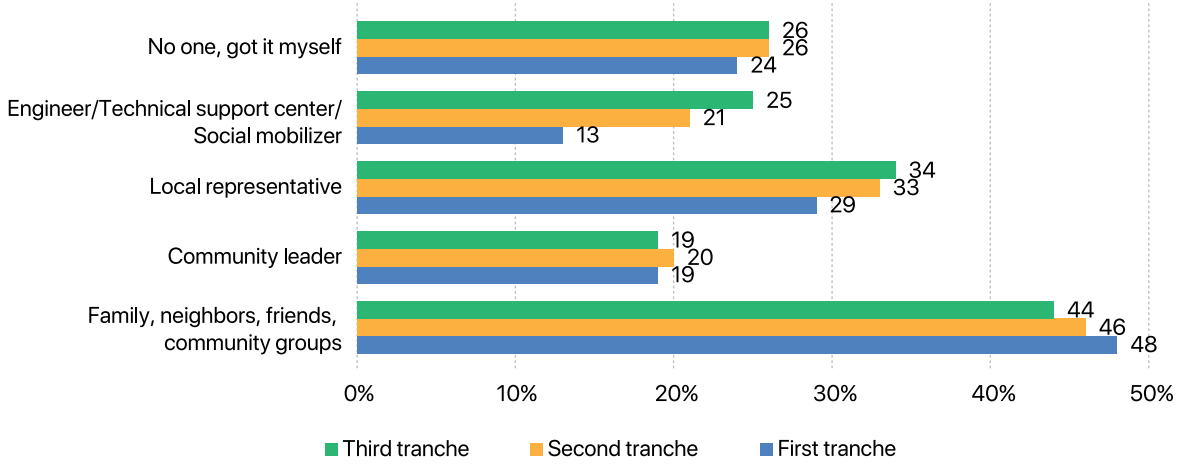
Figure 4.10: Problems faced in accessing grant tranches (among those who got at least one tranche, IRM-5,weighted, 1st tranche base=2,775, 2nd tranche base=2,282, 3rd tranche base=1,998)



Assistance for grant receipt

Housing grant recipients were also asked if anyone assisted them in receiving different grant tranches. Family, neighbors, friends, and community groups were cited as the most common sources of help for any of the three tranches (48% first, 46% second, 44% third tranche). Local representatives were the second most mentioned source of help, and they were mentioned more often for the second and third tranches. Similarly, engineers/technical support centers/and social mobilizers were mentioned as a source of assistance for getting the second and third tranches, rather than the first tranche (21% and 25% compared to 13%). Similar shares mentioned community leaders for the different tranches. A quarter of grant recipients who received each of the three tranches said that no one assisted them (Figure 4.11).

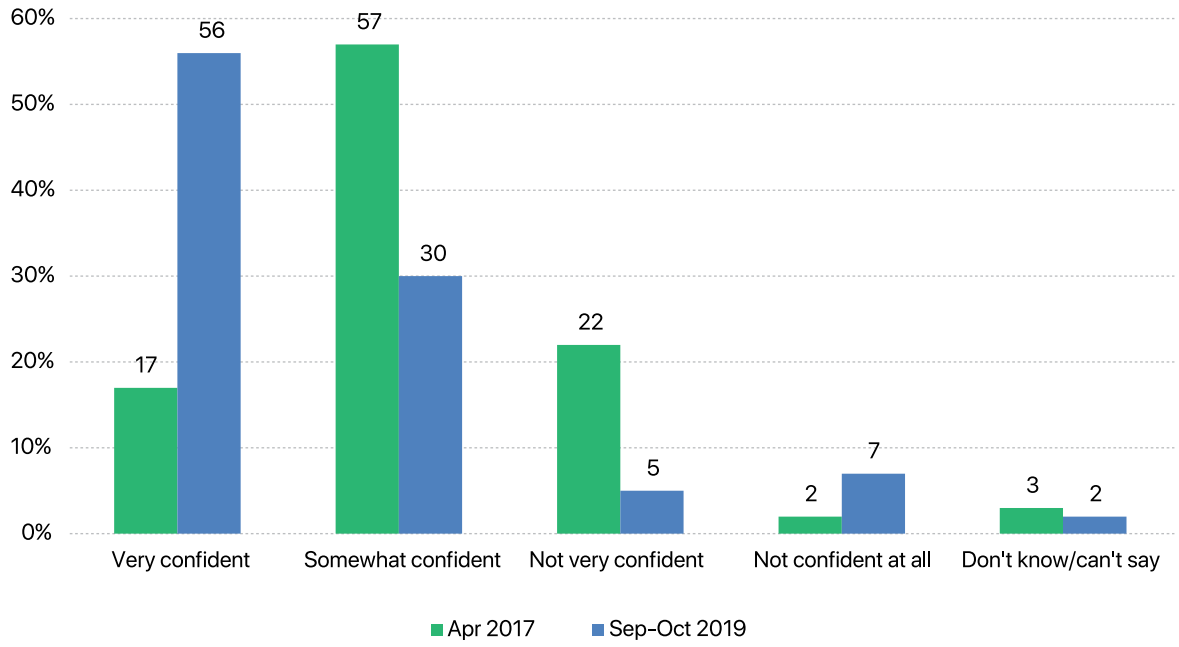
Figure 4.11: Who provided assistance to access the grant (-among those who got at least one tranche, IRM-5,weighted, 1st tranche base=2,775, 2nd tranche base=2,282, 3rd tranche base=1,998)



Confidence in receiving all three tranches of the grant

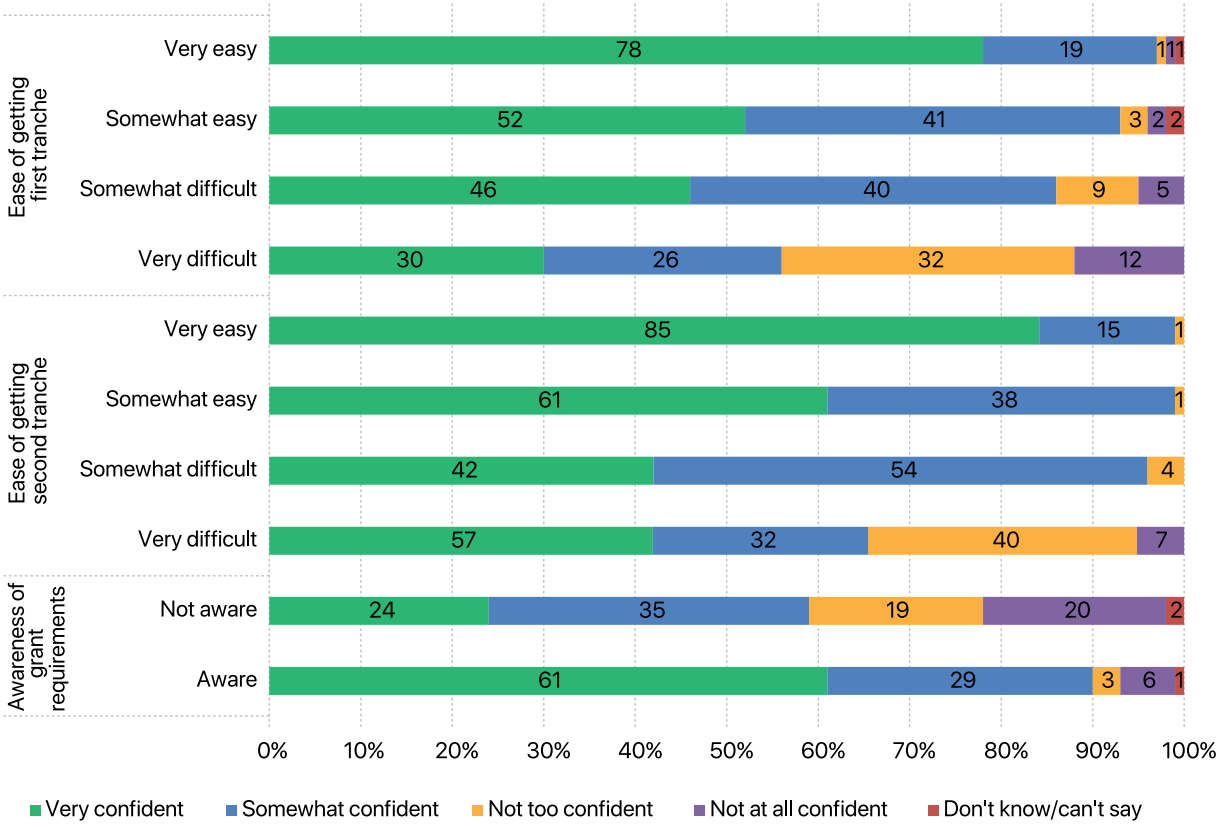
As an additional measure of how well the program worked, people who had received the first and second tranches were asked how confident they were about receiving all tranches of the NRA housing grant. People who had started receiving the grant expressed confidence in getting all three tranches of the grant both in IRM-4 and in IRM-5 (Figure 4.12). However, the share who said they were 'very confident' increased by 39 points in this time period, suggesting increased confidence among grant recipients in being able to access the full grant amount.

Figure 4.12: Confidence in receiving all three grant tranches (-among those who got first, or first and second tranches, IRM-4 base=3,494, IRM-5 base=5,057)



Confidence in getting all three tranches of the grant was positively associated with previous experience in getting the grant as well as knowledge about the grant. Six in ten grantees who were aware of the grant requirements were very confident, compared to just a quarter who were unaware. Experience receiving previous tranches, particularly the second one, was also associated with whether people thought they can get all of the grant money. Among those who found getting the first tranche very easy, 78 percent were very confident of getting all of the grant amount as were 85 percent of those who thought getting the second tranche was very easy.

Figure 4.13: Confidence in receiving all three grant tranches – by awareness of requirements, and by ease of getting first tranche and second tranche (IRM-5, weighted, base=3,114)



4.4 Awareness of grant requirements

Those who were declared eligible to receive the housing reconstruction grant were asked whether they were aware of the requirements that needed to be met to get the various tranches . Most ore-spondents eligible for the grant (85%) said they knew of the grant requirements. This was a substantial increase from IRM-4, when only half said they were aware.

People in severely hit districts, rural areas, and those whose houses were classified as being fully damaged were more likely than others to know the requirements of receiving various grant tranches. Notably, those in Kathmandu were less likely to know of the requirements compared to residents of other districts. Men were slightly more likely than women to know the requirements. Those who were illiterate were less likely than those who had at least some education to know what the require-ments were.

Table 4.7: Awareness of grant requirements – by district impact, district, rural/urban, remoteness, education, gender, official damage assessment (among those eligible for the grant, IRM-5, weighted, base=3,114)[15]

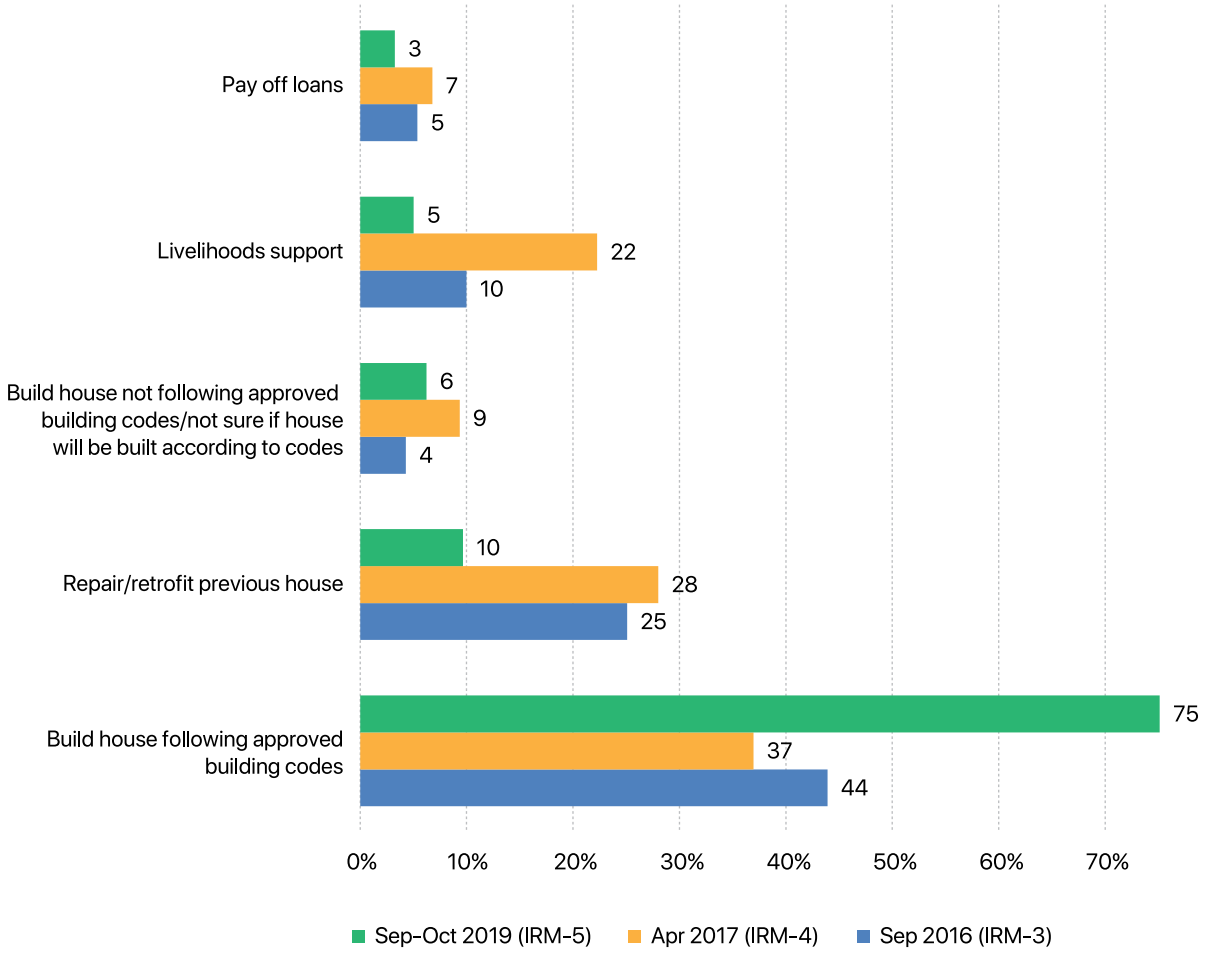
		Aware	Not aware
		%	%
Overall		***85***	***14***
District impact and district	**Severely hit**	**91**	**8**
	Dhading	96	4
	Gorkha	86	12
	Nuwakot	98	2
	Ramechhap	89	11
	Sindhupalchowk	86	12
	Crisis hit	**77**	**21**
	Bhaktapur	92	6
	Kathmandu	71	27
	Okhaldhunga	86	13
	Hit with heavy losses	**81**	**18**
	Lamjung	84	15
	Solukhumbu	78	20
	Hit	**82**	**18**
	Syangja	82	18
Rural/urban	Rural	87	11
	Urban	77	23
Gender	Female	81	17
	Male	90	10
Education	Illiterate	79	19
	Literate	92	8
	Primary Level	89	11
	Lower Secondary Level	83	16
	Secondary Level	84	17
	SLC Pass	80	14
	+2/Intermediate Pass	91	9
	Bachelor Pass	92	8
	Master & Above	97	3
Official housing damage	Fully damaged	86	13
	Partially damaged	67	32
	Not damaged	75	25

15 Remaining shares were unsure/refused to answer.

4.5 Use of/planned use of the grant

Three in four people among those declared eligible to get the NRA grant said they were using/planned to use it to build a new house following government-approved building guidelines for earthquake-resilient houses. This is a marked change from earlier IRM surveys where fewer people gave this response (37% IRM-4, 44% IRM-3). The share who mentioned rebuilding/retrofitting their previous house also decreased—about a quarter mentioned it in previous IRM surveys, while only one in ten mentioned this use in IRM-5. Just over two in ten grant-eligible households mentioned using the cash grant for livelihood support in IRM-4, but only 5 percent mentioned it in IRM-5 (Figure 4.14).

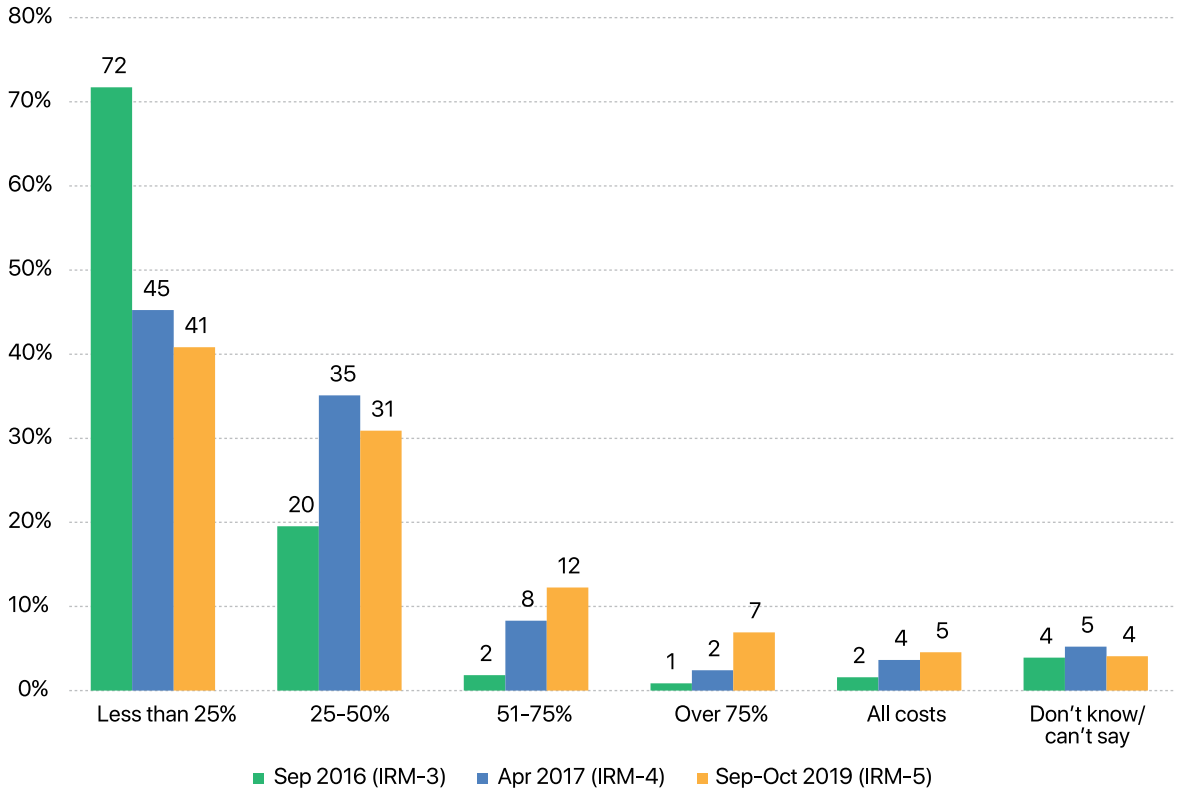
Figure 4.14: Use/planned use of grant money (among those declared eligible, IRM-3 base=3,107, IRM-4 base=3,883, IRM-5, base=3114)



Reconstruction costs covered by the grant

The NRA housing reconstruction grant was envisioned to cover some of the costs of reconstruction. Therefore, it is important to understand how much of the total costs beneficiaries thought the grant would cover. Among those declared eligible for the housing reconstruction grant, four in ten said the grant would cover less than 25 percent of their total costs, three in ten said it would cover between 25 to 50 percent of the costs, one in ten said between 51 to 75 percent of the cost, and about one in ten said it would cover most or all of the costs. The share who said it would only cover less than a quarter of the costs decreased sharply from 72 percent in IRM-3, to 45 percent in IRM-4, and has remained around the same in IRM-5. At the same time, the shares who mentioned it would cover between 25-50 percent or 51-75 percent had increased (Figure 4.15).

Figure 4.15: Proportion of total reconstruction cost that the housing grant will cover (IRM-3 base=3,107, IRM-4 base=3,883, IRM-5, base=3114)



4.6 Grievances

The government issued guidelines on how complaints about the beneficiary lists should be collected and addressed. However, guidance on how to resolve the most difficult complaints was not issued. The guidelines outline that complaints should be filed through official grievance forms at the local government or NRA offices[16]. Grievance mechanisms were established for this purpose at the ward/ municipality level, district level, the NRA sub-regional office, as well as at the NRA central office. At the time of research, grievances were still being processed but in June 2020, the NRA announced that it

16 https://www.nepalhousingreconstruction.org/does-program-have-a-mechanism-for-addressing-grievances

had addressed all 634,973 grievances filed and added another 106,465 beneficiaries as reconstruction beneficiaries and another 67,681 as retrofitting beneficiaries through the grievance mechanism.[17]

Who filed grievances?

Respondents who mentioned that they were not declared eligible for the housing reconstruction grant (1,604 respondents) were asked if they or anyone on their behalf had filed a grievance about it. About three in ten respondents (27%) had filed a grievance, and seven in ten had not (72%). Across districts, those in Ramechhap (83%), Okhaldhunga (80%), and Gorkha (74%) were the most likely to have filed a grievance. People in urban areas were much more likely than those in rural areas to have filed a grievance (42% vs. 10%) (Table 4.8).

People whose houses were officially classified as fully damaged were more likely to have filed a grievance (43%), compared to those in the partially damaged (33%) and not damaged (21%) categories (Table 4.8). There were people who could have filed a grievance because they were not declared eligible, but based on self-reporting in the survey, would be eligible; 58 percent of those whose houses were officially classified as fully damaged, and 66 percent of those who were classified as having partially damaged houses did not file a grievance. People who self-reported higher damage were also more likely to have filed a grievance.

Table 4.8: Share of people who filed a grievance among those declared ineligible for the housing reconstruction grant – by district impact, district, and official damage assessment (IRM-5, weighted, base=1,604)

Overall (%)		**27**
District impact and districts (%)	**Severely hit**	**73**
	Dhading	67
	Gorkha	74
	Nuwakot	69
	Sindhupalchowk	80
	Ramechhap	83
	Crisis hit	**15**
	Bhaktapur	23
	Kathmandu	12
	Okhaldhunga	63
	Hit with heavy losses	**32**
	Solukhumbu	61
	Lamjung	13
	Hit	**46**
	Syangja	46
Rural/urban (%)	Rural	42
	Urban	10
Official damage assessment (%)	Fully damaged	43
	Partially damaged	33
	Not damaged	21
Reported housing damage (%)	Completely destroyed	60
	Badly damaged (major repairs needed)	35
	Habitable (minor repairs needed)	19

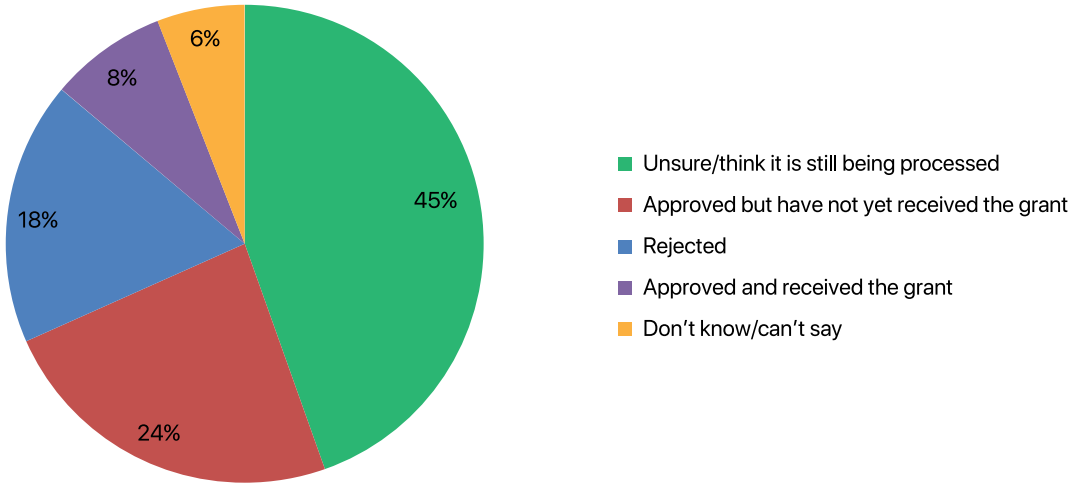
17 http://www.nra.gov.np/en/news/details/P4M4D8SnX7CXgD-y-7uXzAQK6z4Z-qcFCm2pAD_y-iM

Status of the grievance

The most common response from individuals who filed a grievance was that they were unsure of the status and thought their grievance was still being processed (45%). A quarter said that they were approved to receive the grant, but had yet to receive it; 18 percent said they were rejected, and 8 percent were approved and had received the grant.

The share who said their grievance was approved and had received the grant was highest in Lamjung (20%), Kathmandu (16%), and Gorkha (14%). Those who said their grievance was rejected was highest in Bhaktapur (49%), Dhading (25%), and Sindhupalchowk (25%).

Figure 4.16: Status of grievance (among those who had filed a grievance, IRM-5, weighted, base=1,604)



Who processed the grievance?

Those who had submitted a grievance were asked who had filed/processed their grievance. Two-thirds of those who had filed a grievance after their ineligibility said their grievance was processed (forwarded to the NRA) by the local government (66%) and a quarter was unsure (21% unsure, 5% don't know). Few mentioned the local NRA office (5%) or the NRA center (3%). Responses were similar across geographical, damage, and demographic categories. However, the share who mentioned the central NRA as the entity processing their grievance was relatively higher in Lamjung (42%) and Gorkha (24%), compared to other districts.

Who assisted in filing the grievance?

When it came to assistance in filing the grievance, respondents cited their local government official/representative (37%), friend/family/neighbor (17%), and engineer/technical support (5%). A quarter of those who filed a grievance also said that they did it by themselves. A higher share of those in severely hit districts mentioned local government officials/representatives, compared to less affected areas (38% in severely hit districts vs. 14% in hit districts).

Chapter 5
Retrofitting

Photo: Aruna Limbu (Lisankhu, Sindhupalchowk)

This chapter discusses respondents' awareness of and interest in retrofitting. It highlights levels of awareness of the retrofitting grant among different demographic groups and across geographical areas. The chapter also describes who preferred, or would have preferred, receiving the retrofitting grant over having to rebuild completely, as well as people's reasons for not being interested in retrofitting. Finally, it presents findings on eligibility for the retrofitting grant, receipt of the grant, and intended or actual uses of the grant.

Key Findings

Awareness

- Around one-fifth (21%) of respondents were aware of the retrofitting grant. Awareness of the NPR 100,000 (USD 854) retrofitting grant was higher in districts that were most impacted by the earthquake, among respondents with partially damaged houses, and in rural areas.
- The three most commonly cited sources of information for the retrofitting grant were family, friends, and neighbors (which accounted for 81% of those aware of the retrofitting grant), community or community groups (52%), and radio (47%).

Interest in retrofitting

- Nearly three in ten (28%) respondents with housing damages were interested, or would have been interested, in repairing their houses with the retrofitting grant rather than having to rebuild completely. People in urban areas were twice as likely as those in rural areas to express interest in retrofitting. Residents of Syangja, Kathmandu, and Okhaldhunga were most likely to say they were interested in the retrofitting grant.

- Most of the 61 percent of respondents who were not interested in retrofitting said their house was too badly damaged to be retrofitted. The second-most commonly cited reason for not being interested in retrofitting was the respondents' preference to stay in a new house rather than repairing an old house.

Access to and use of the grant

- Out of respondents whose houses had suffered some level of damage (83%, or 4,834 respondents), one-third (33%) reported that they were not declared eligible for the housing reconstruction grant. Among those, eight percent (129 respondents) said they were declared eligible for the retrofitting grant, instead. Overall, this accounts for two percent of the total respondents surveyed in IRM-5.

- Not all those eligible for the retrofitting grant have received the money. At the time of the survey, 38 percent of eligible households received the first tranche, and five percent received the second tranche.

- Of the respondents eligible for the retrofitting grant, a little more than four in ten (44%) stated that they had either rebuilt/repaired or plan to rebuild/repair their old houses with the retrofitting grant.

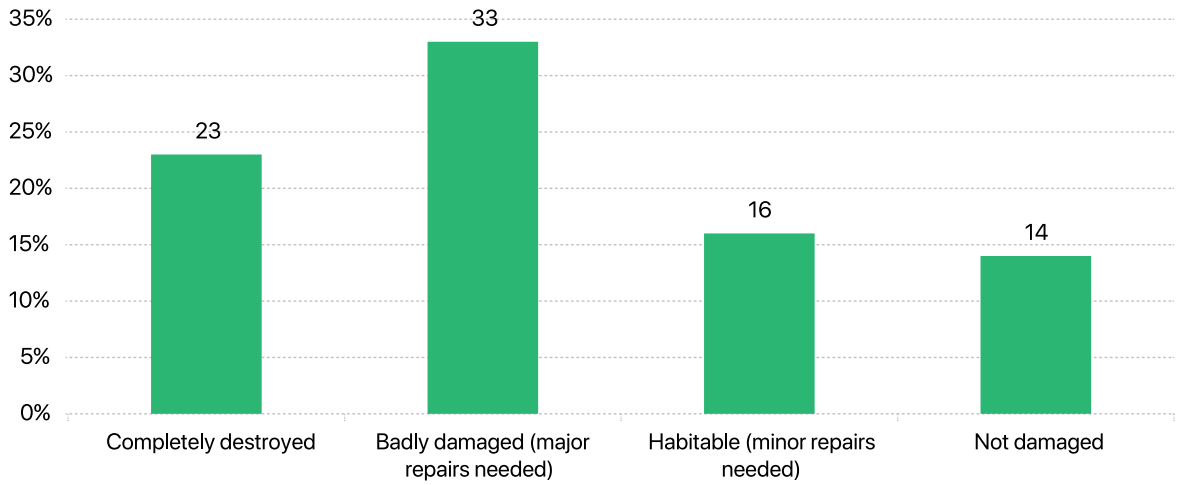
5.1 Awareness of retrofitting

Of all respondents, one fifth (21%) were aware of the Nepal government's NPR 100,000 (USD 854) retrofitting grant provided to those with partial housing damage. Three fourths (75%) of respondents were not aware[1].

Awareness of retrofitting grants was higher among respondents whose houses were partially damaged. One third (33%) of those who reported that their houses were badly damaged and needed major repairs were aware of the retrofitting grant, compared to 23 percent of those with completely destroyed houses, 16 percent of those with habitable houses, and 14 percent of those whose houses were not damaged in the earthquake (Figure 5.1).

1 The rest were unsure and could not say.

Figure 5.1: Awareness of retrofitting grant - by reported housing damage levels [IRM-5, weighted, base=5857]

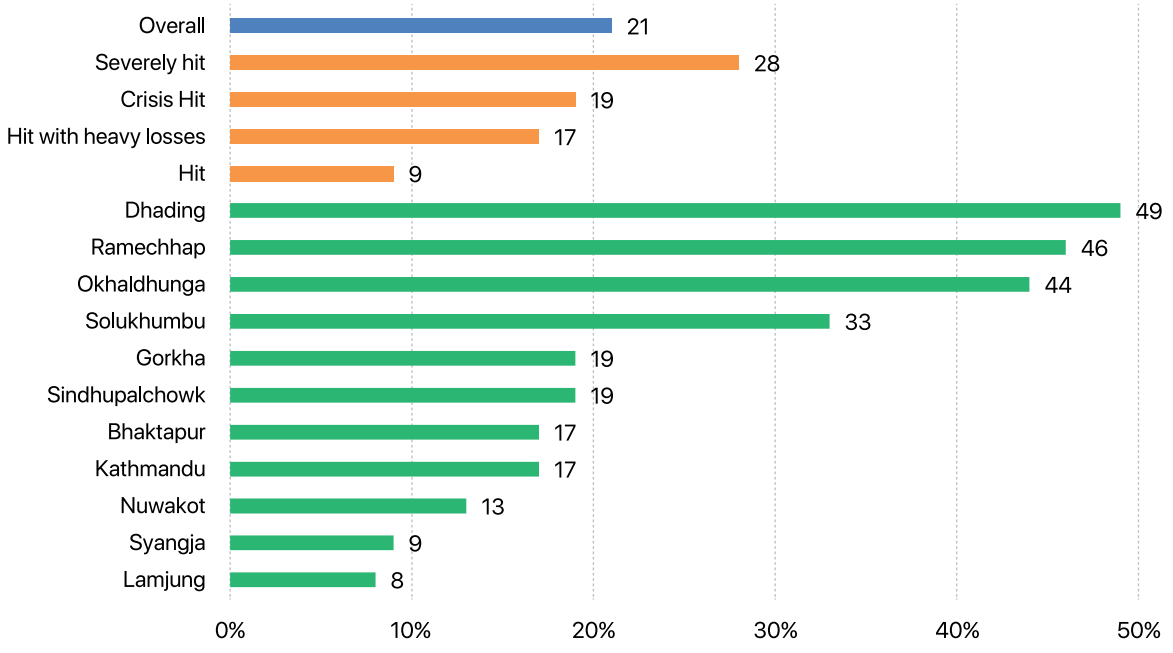


Awareness of the retrofitting grant was higher in districts that were more heavily impacted by the earthquake and awareness decreased with decreasing impact level (Figure 5.2) – at least in part because fewer respondents in the lesser-impacted districts had suffered housing damages.

Respondents in Dhading (49%), Ramechhap (46%), and Okhaldhunga (44%) stand out as having greater levels of awareness than other districts; awareness was more than double the overall average. In other earthquake-affected districts, the level of awareness remained below average.

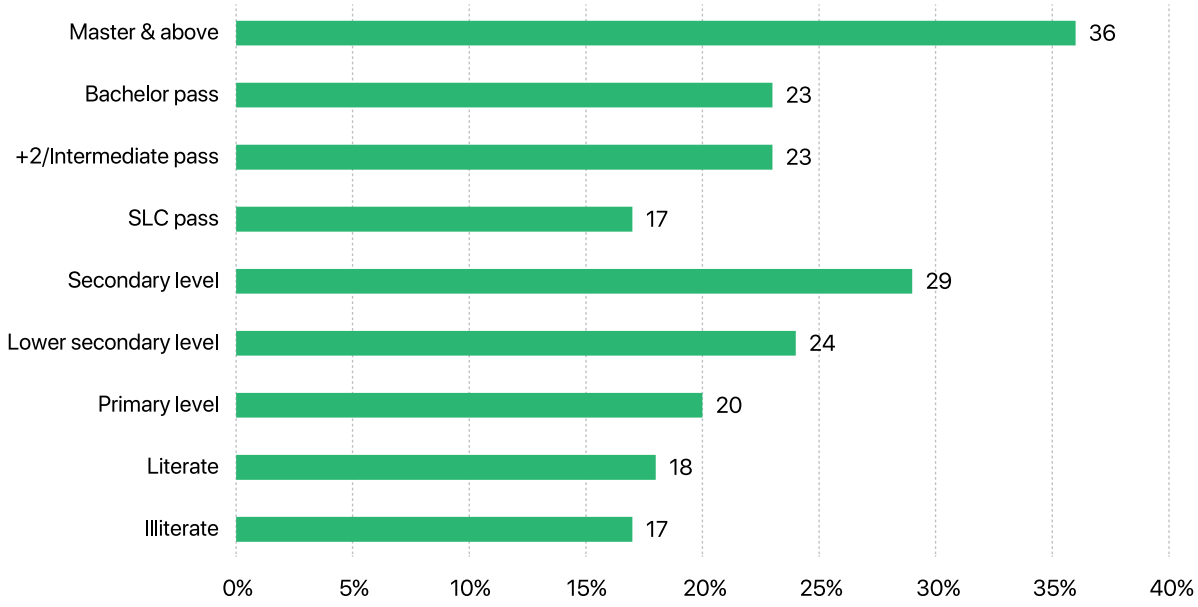
Respondents residing in rural areas (22%) were slightly more likely to be aware of the retrofitting grant than those in urban areas (18%).

Figure 5.2: Awareness of retrofitting grant – by district and district impact level [IRM-5, weighted, base=5857]



Awareness of the retrofitting grant increased with higher levels of education, but decreased with rising income levels (Figure 5.3). Those with lower incomes (25%) or medium incomes (23%) were more likely to be aware of the retrofitting grant than those with high incomes (18%). Men (25%) were also more aware than women (17%).

Figure 5.3: Awareness of the retrofitting grant – by education level [IRM-5, weighted, base=5857]

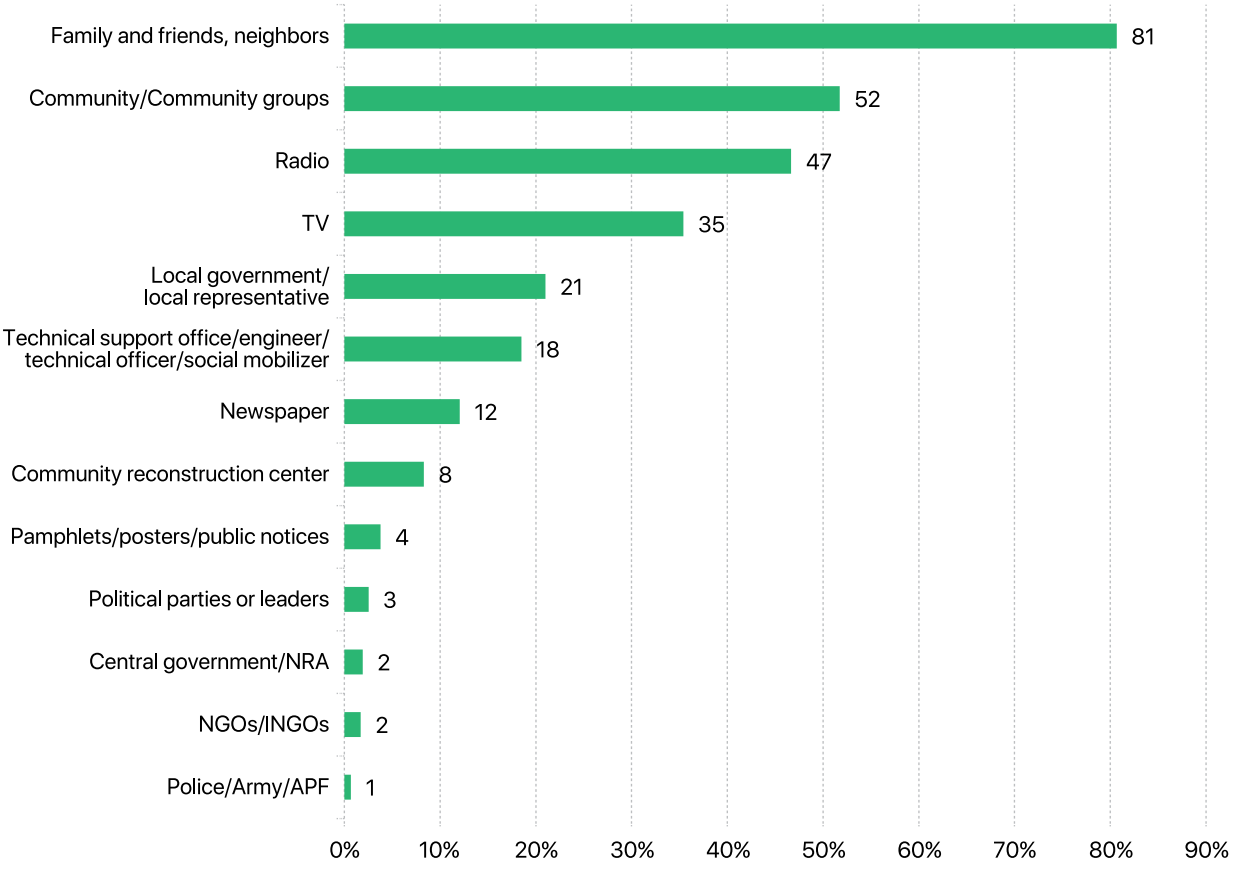


Sources of information for the retrofitting grant

The 21 percent of respondents (1,234 people) who were aware of the retrofitting grant were further asked to state the sources from which they heard about it. Family, friends and neighbors (81%) were most frequently cited as the main information source, followed by community or community groups (52%), and then radio (47%). Around one-fifth each cited local government/local representatives (21%), or technical support offices/technical officers (18%) as information sources.

Answers differed only slightly for those who were declared eligible for the retrofitting grant (Chapter 5.3). Most of them had heard about it from family, friends, and neighbors (86%), community or community groups (56%), or radio (41%). Relatively fewer heard about retrofitting from local governments and local representatives (23%), or from technical support offices or technical officers (13%). Answers were similar for those with different levels of housing damage.

Figure 5.4: Sources of information on the retrofitting grant [among those who had heard about this grant, IRM-5, weighted, base=1234]



5.2 Interest in retrofitting

In IRM-5 (September -November 2019), all respondents who self-reported some level of housing damage (4,834 respondents) were asked if they are, or would have been, interested in the retrofitting grant instead of rebuilding a new house–irrespective of whether they had qualified for either of the two types of housing grants. Over one-quarter (28%) said they prefer, or would have preferred, retrofitting over having to rebuild a new house, and nearly two-thirds (62%) were not interested.[2]

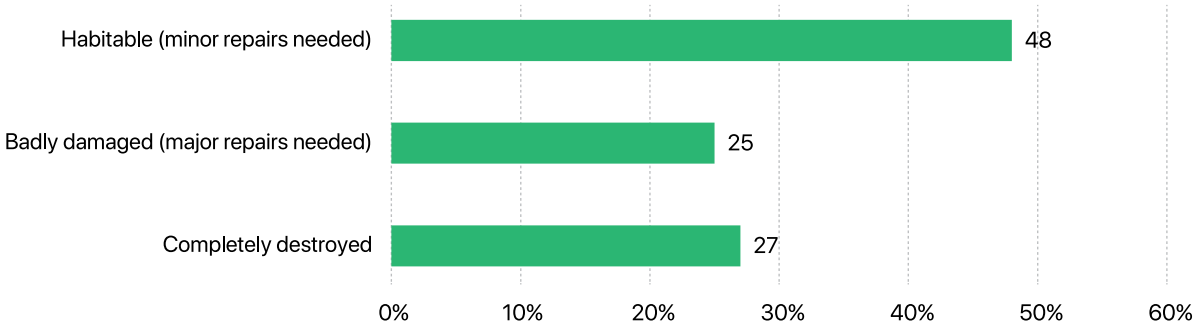
Residents of urban areas (47%) whose houses suffered some level of damage during the earthquake were more than twice as likely as those in rural areas (21%) to say they are, or would have been, interested in the retrofitting grant to repair their house rather than rebuilding a new house.

Those who said their houses were habitable, but need(ed) minor repairs had the highest interest in retrofitting (48%) (Figure 5.5) – likely because they had not yet demolished their house to build a new one.[3] One-quarter each among those with badly damaged (25%) and completely destroyed (27%) houses said they would be, or would have been, interested in retrofitting their house.

2 The remaining shares are unsure or could not say.

3 Findings from the qualitative research conducted alongside this survey reveal that many people with minor damage were still using their old house in some capacity, but often felt it was not safe enough. See, The Asia Foundation and Democracy Resource Center Nepal (2020). Aid and Recovery in Post-Earthquake Nepal: Independent Impacts and Recovery Monitoring Phase 5 – Qualitative Field Monitoring (November 2019). Kathmandu: The Asia Foundation

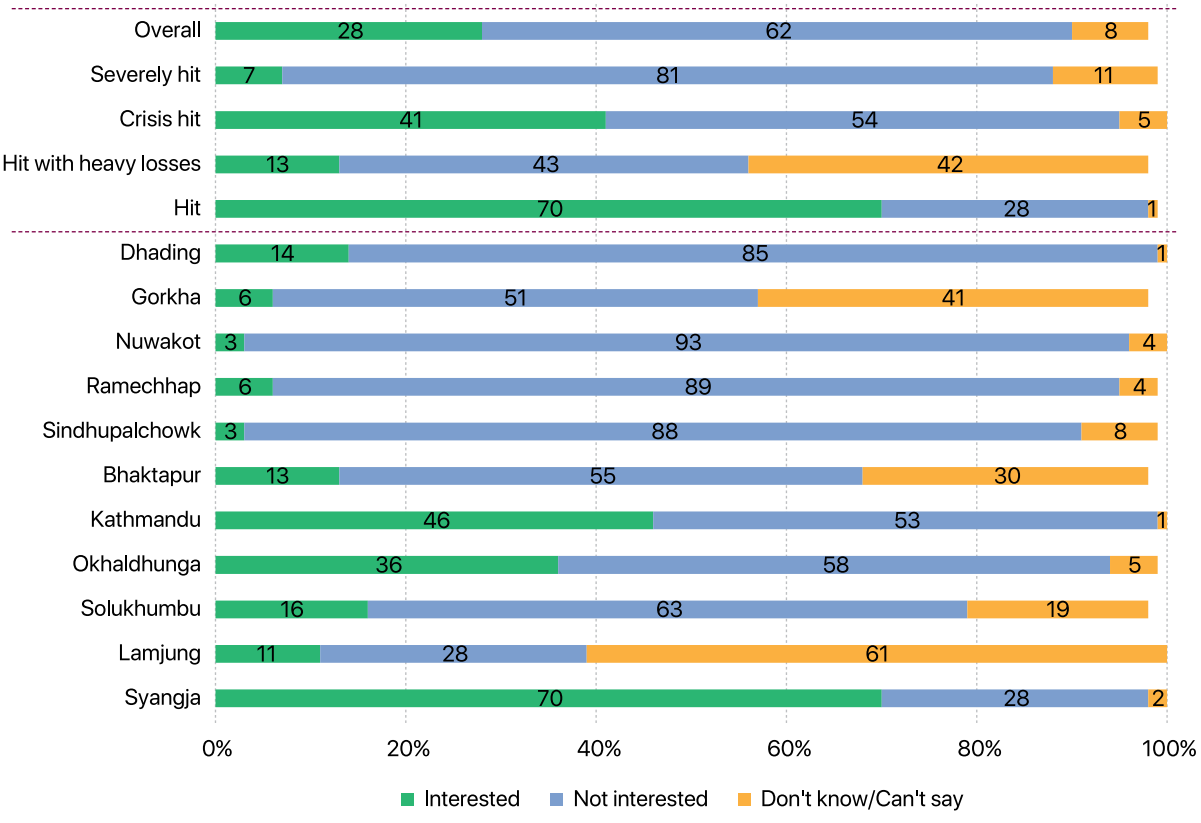
Figure 5.5: Interest in retrofitting – overall and by reported housing damage levels [among those with housing damages, IRM-5, weighted, base=4834]



Respondents from hit districts (70%) who had suffered some form of damage were the most likely to say they would like, or would have liked, to receive the retrofitting grant to repair their house instead of rebuilding a new house, whereas only seven percent of respondents from severely hit districts whose houses had been damaged or destroyed said the same.

Residents of Syangja (70%), Kathmandu (46%), and Okhaldhunga (36%) whose houses were partially or completely damaged were more likely to say they would like, or would have liked, to receive the retrofitting grant to repair their house rather than rebuilding a new one.

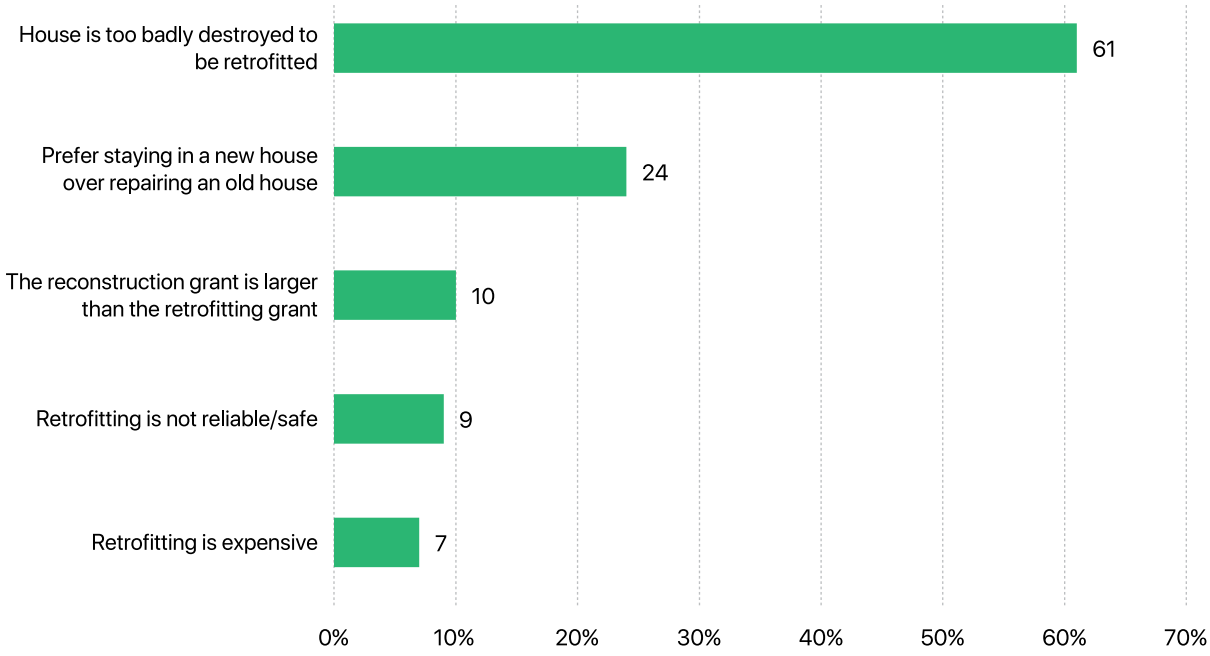
Figure 5.6: Interest in retrofitting – by district and district impact level [among those with housing damages, IRM-5, weighted, base=4834]



Reasons for not being interested in retrofitting

Respondents who said they do not prefer, or would not have preferred, receiving the retrofitting grant over rebuilding (62% of all respondents with housing damage) were asked for their reasons why. Most said their houses were too badly destroyed to be retrofitted (61%). Another commonly cited reason was the respondents' preference to stay in a new house, rather than repairing an old house (24%). Less commonly cited reasons were the fact that the reconstruction grant amount was higher than the retrofitting grant amount (10%), the perception that retrofitting is unreliable (9%), and the perception that retrofitting is expensive (7%) (Figure 5.7). Unsurprisingly, those with higher levels of housing damage, and those in more heavily impacted districts were comparatively more likely to say they were not interested because their houses were too badly damaged to be retrofitted.

Figure 5.7: Reasons for not being interested in retrofitting [among those with housing damage who said they were not interested in the retrofitting grant, IRM-5, weighted, base=2971]



Respondents from rural areas (28%) were more than twice as likely as those in urban areas (11%) to say they reject retrofitting because they prefer staying in a new house over repairing an old one – suggesting that people in urban areas may be more inclined to repair their houses and reject retrofitting for other reasons. However, people in urban areas questioned the reliability of retrofitting. Twenty-three percent of people in the urban district of Bhaktapur said they were not interested in retrofitting because they consider it unreliable, compared to the overall average of 9 percent who said the same.

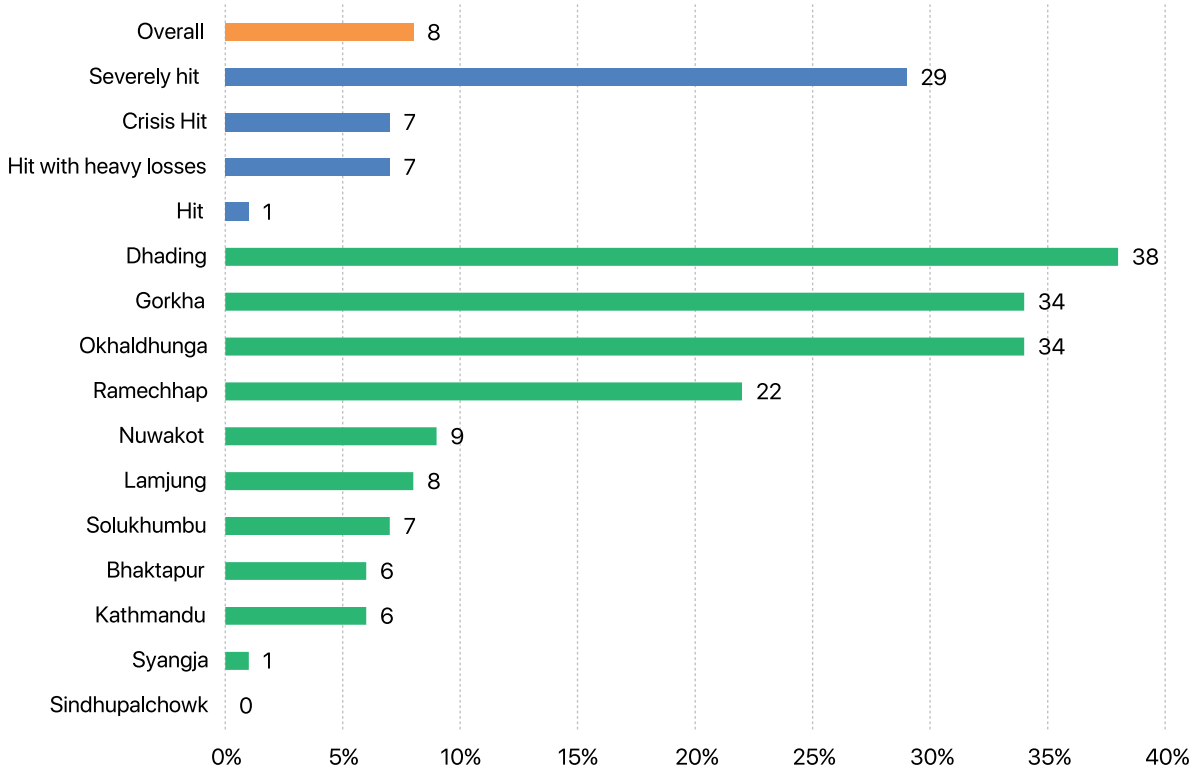
5.3 Retrofitting grant

Eligibility for the retrofitting grant

Respondents with housing damage who were not declared eligible for the NPR 300,000 (USD 2,560) housing reconstruction grant (1,604 people) were asked if they were declared eligible for the NPR 100,000 (USD 853) retrofitting grant. Among them, eight percent said that they were declared eligible for the retrofitting grant (129 people, which accounts for two percent of the total survey sample). Eligibility does not equal receipt of the grant, as eligible beneficiaries had to sign agreements and then wait for the transfer of the first tranche of the grant into their beneficiary bank accounts. Not all of those eligible have signed agreements.[4]

People in rural and remote areas were more likely to have been declared eligible for the retrofitting grant than those in urban or less remote areas (Figure 5.8). More people in severely hit districts were declared eligible; yet, none of the respondents in Sindhupalchowk were found eligible, possibly reflecting the extensive damages in this district where most houses were completely destroyed. There are more people in Dhading, Okhaldhunga, and Gorkha, than in the other districts, who were eligible for retrofitting support (Figure 5.8).

Figure 5.8: Share of people declared eligible for the retrofitting grant – by district, district impact level, rural-urban and remoteness [among those self-reporting damage, but ineligible for the housing grant], IRM-5, weighted, base=1604]

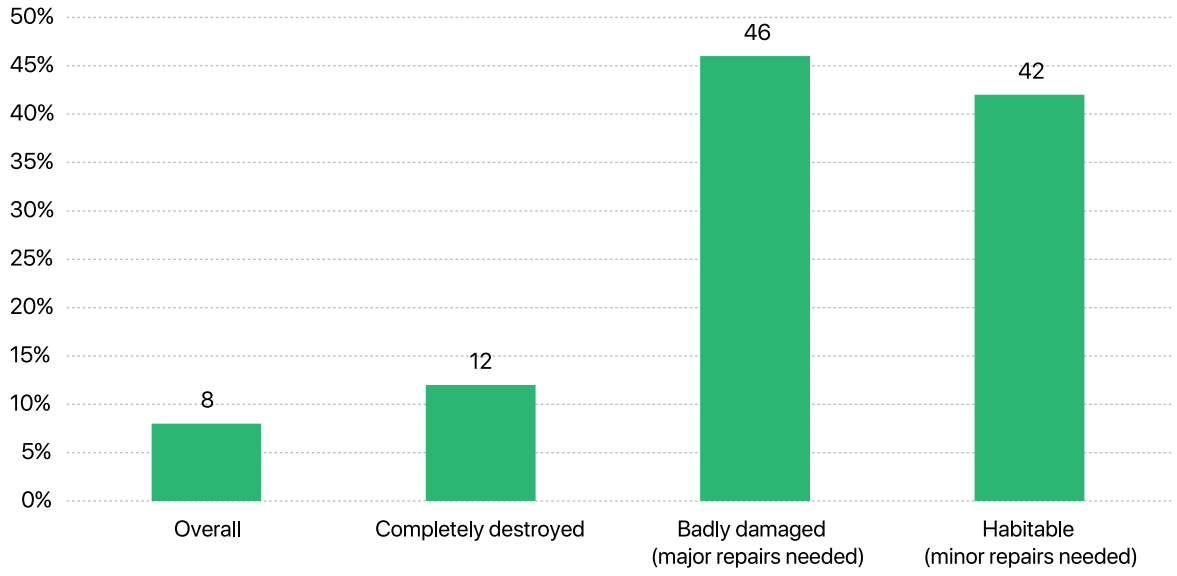


4 At the time of research, around half of those eligible for retrofitting had signed agreements, compared to nearly all of those eligible for the housing reconstruction grant. By August 2020, just over 70 percent of those eligible for retrofitting had signed grant agreements, and just under 70 percent had received the first tranche, while less than one percent had received the second tranche. http://www.clpiugmali.gov.np/reconstruction-update [accessed on 12 August 2020].

Housing damages among those eligible for retrofitting

Most of those eligible for retrofitting have partially damaged houses. Among the 129 respondents who were eligible for the retrofitting grant, 12 percent had completely destroyed houses, 46 percent had badly damaged houses, and 42 percent had habitable houses needing minor repairs. Although the number of respondents in IRM-5 (September- November 2019) who were eligible for the retrofitting grant was small, it appears there may be some errors in targeting of the retrofitting grant because a number of respondents declared their house completely destroyed, yet were found eligible for retrofitting, and not for the housing reconstruction grant.

Figure 5.9: Levels of damage among those eligible for the retrofitting grant (reported damages, IRM-5, weighted, base=129)

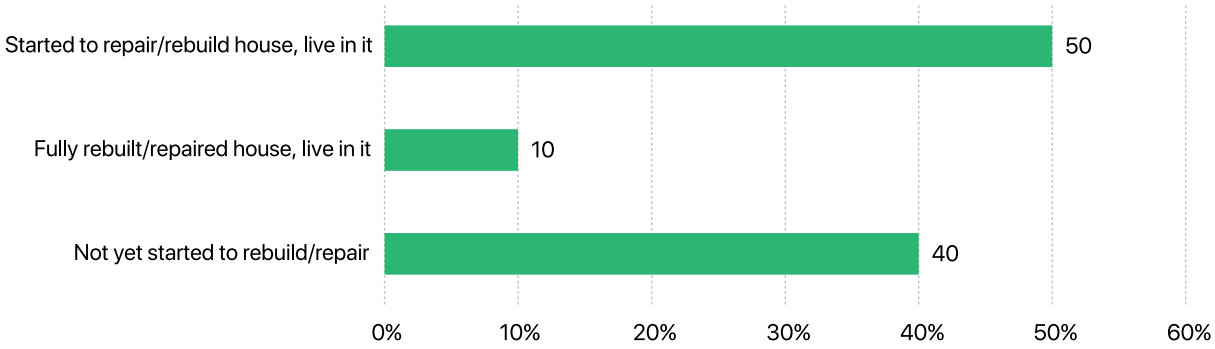


How much of the retrofitting grant have they received?

Of the 129 respondents eligible for the retrofitting grant, 38 percent (49 respondents) had received the first tranche and 5 percent (6 respondents) had received the second tranche of the grant, as of September/October 2019. Those who received the first tranche said they received NPR 50,594 (USD 432) on average; and those who received the second tranche reported receiving an average of NPR 54,144 (USD 462).

As shown in Figure 5.10, half of those eligible for the retrofitting grant had partially rebuilt/repaired a new house and lived in it at the time of the survey; 40 percent had not yet started to rebuild or repair their house, and 10 percent had fully rebuilt/repaired their house.

Figure 5.10[5]: Progress in housing recovery among those eligible for the retrofitting grant [IRM-5, Weighted, base=129]



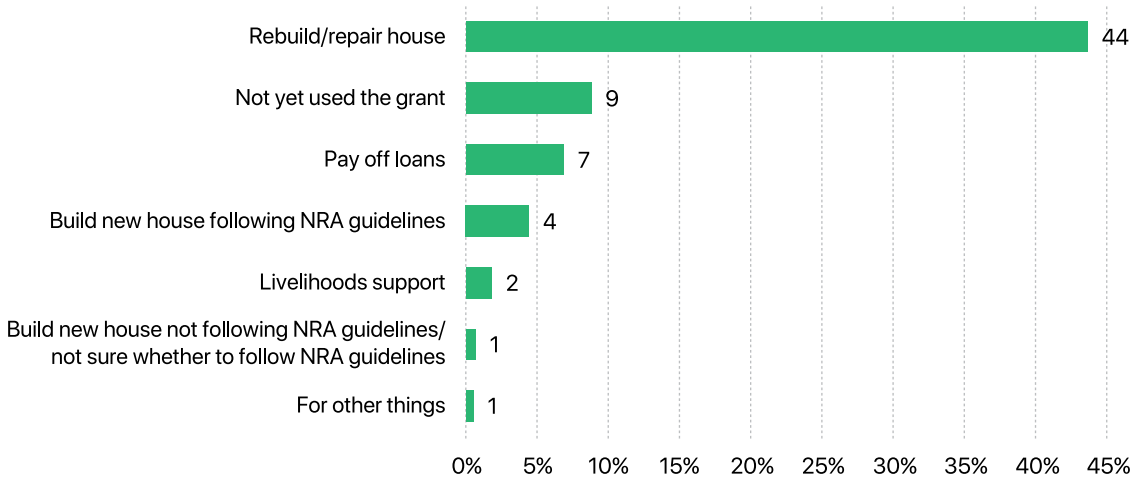
Access to the retrofitting grant

Respondents (49 people) who were declared eligible for the retrofitting grant and had received at least one tranche were asked how easy it was for them to receive it. One quarter (25%) of them reported that it was 'very easy' to receive the grant, nearly two-thirds (61%) said it was 'somewhat easy,' and fifteen percent said it was 'somewhat' or 'very difficult' to access the grant.

Use of the retrofitting grant

The 129 respondents declared eligible for the retrofitting grant were asked what they would use the grant money for, or in the case of people who already received it, what they had used it for. Most said they intended to use it for housing recovery. Over two-fifths (44%) said they will use it, or have used it, for repairing/rebuilding their house. Fewer mentioned other uses, such as loan repayments (7%), building a new house (4%), or livelihood support (2%).

Figure 5.11: Uses of the retrofitting grants [intended or actual use, IRM-5, weighted, base=129, multiple responses possible]



5 Note about Figure 5.10: Only 0.8% had started to repair/rebuild a house without living in it, while 0% had fully rebuilt/repaired their house but did not live in it at the time of the survey.

Costs of retrofitting

Respondents declared eligible for the retrofitting grant were asked to state actual or estimated costs of retrofitting. On average, respondents stated that actual costs to retrofit their damaged house were NPR 660,890 (USD 5,641). The median amount was NPR 300,000 (USD 2,560) – three times as much as the amount of the retrofitting grant.

Comparing costs of reconstruction with those of retrofitting (actual or estimated) reveals that people expected rebuilding to cost more. On average, people spent, or expect to spend, nearly twice as much to rebuild their new houses (NPR 1,201,039 / USD 10,251) as to retrofit it (NPR 660,890 / USD 5,641). The median cost for reconstruction (NPR 600,000 / USD 5,121) was also twice as much as that for retrofitting (NPR 300,000 / USD 2,560).

Photo: Dewan Rai (Okhaldhunga)

Chapter 6
Coping Strategies

Photo: Manasi Prasai (Barpak, Gorkha)

The IRM surveys have looked at trends in borrowing, asset sales, migration, and food consumption to examine coping strategies used by people in earthquake-affected areas. This chapter provides an overview of commonly used coping strategies and trends that have emerged among various demographic groups, over the nearly five years since the earthquake. Debt and borrowing are discussed in greater depth, given they were reported as common coping strategies in all IRM surveys. The analysis also covers sale of assets, remittances, migration, and food consumption.

Key findings

Borrowing

- Borrowing increased over time in the earthquake affected districts. In IRM-1 (June 2015), only 14 percent reported borrowing, whereas in IRM-4 (April 2017), 44 percent reported the same. By IRM-5 (Sept-Oct 2019), 39 percent of respondents said they had borrowed in the past year. Those in severely hit districts and those with higher levels of damage were more likely to have borrowed. The likelihood of borrowing decreased with the rise in income and increased with remoteness. Hill Dalits were the most likely to report borrowing in the last year across caste/ethnic groups by at least 10 percentage points.

- At NPR 391,864 (USD 3,335) the average loan amount was highest in IRM-5 and has increased threefold since IRM-1. The average amount has increased mostly due to urban loans in Kathmandu and Bhaktapur. Although people in higher income brackets were less likely to borrow at all, their loan amounts were larger. People who had done nothing toward reconstructing their houses had smaller loans than those who had completed or were in the process of rebuilding their homes.

- One-quarter of borrowers mentioned cooperatives as their loan source. Immediately after the earthquake, borrowing from friends and family was common, but in later years, taking loans from cooperatives was most common. Similar shares mentioned borrowing from banks in all years.

- Interest rates for all loan sources remained steady in the four-year period. In IRM-5, interest rates charged by banks, cooperatives, and other financial institutions ranged from 1.2 to 1.7 percent. Interest rates were slightly higher for informal lending sources; monthly interest rates ranged from 2.2 to 3.8 percent.

- For the first time in IRM data collection, the main reason for borrowing was for reconstruction costs, which also explains the increased amounts borrowed. In previous surveys, livelihood support was the main reason for borrowing. Along with progress toward rebuilding, people were taking out higher loan amounts for reconstruction purposes, suggesting that rebuilding has come at the cost of larger debts.

- Looking at future borrowing intentions, only 9 percent intended to borrow in the next three months, mostly to provide livelihood support. Those with higher levels of housing damage and people living in severely hit districts were more likely than others to say that they will borrow in the future. Similarly, those with lower- and middle-level incomes were much more likely than people with high incomes to say that they will borrow.

- Most said that overall debt stayed the same at the time of survey and before the earthquake. Looking at year-on-year debt level comparisons, although the majority said their debt level stayed the same, those who said it increased grew in IRM-5. After those who said debt stayed the same, more people mentioned debt levels increasing than decreasing, compared to before the earthquake.

Asset Sales

- Less than 10 percent of respondents mentioned selling assets to deal with the effect of the earthquake in all IRM surveys. Asset sales took place in areas that were most affected by the earthquake. Those with higher levels of earthquake damage and those who said they had completed their reconstruction work were most likely to have sold assets.

- Land and livestock were the most commonly sold assets, and the share who sold land increased compared to previous surveys. Urban residents were more likely to sell land than rural residents. Compared to previous rounds, people sold less of their land; most said they sold less than 25 percent of the land they owned.

Migration and Remittances

- The share of respondents who said remittances were a main income source remained similar across IRM surveys. Migration levels appeared to have stayed the same before and after the earthquake. A similar share of respondents reported having a migrant in the family in all IRM surveys. People with higher incomes tended to say remittances were a major income source and were more likely to have a migrant in the family.

- In contrast to earlier IRM surveys, households with migrants said that a single adult migrated, compared to surveys right after the earthquake when entire families had migrated. The main reason for migration remains unchanged: people tended to migrate in search of work.

However, in IRM-5, slightly higher shares mentioned education and lack of housing as reasons for migrating.

- Migration to destinations abroad was more common than to destinations within the country. Those residing in less remote and urban areas tended to send migrants abroad, compared to rural and more remote areas. People with higher incomes also tended to have migrants in destinations abroad, while those with lower incomes said migrants in their family moved to a local destination. Most people said that the migrant in their family had moved temporarily.

Food Consumption

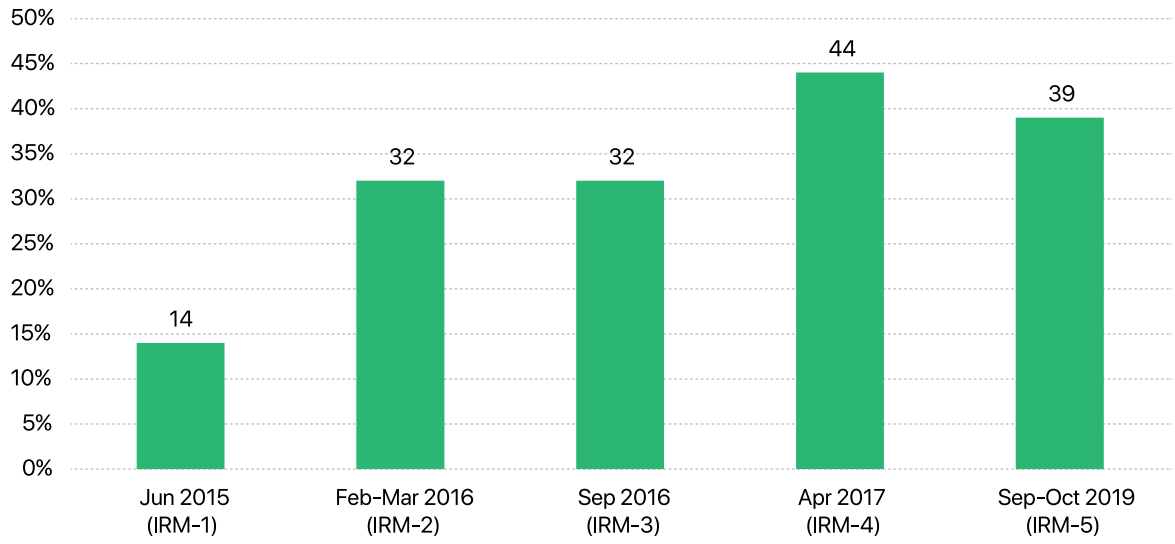
- As with previous survey rounds, most people said that their year-on-year consumption remained more or less the same. Compared to previous survey rounds, a higher share of people said their food consumption had increased over the past year.

6.1 Borrowing

Changes in borrowing over time

Over time, borrowing in earthquake affected areas increased. In IRM-1 (June 2015), only 14 percent of people in earthquake affected districts reported having borrowed money in the past year. The share of borrowers more than doubled to 32 percent in early 2016 and stayed the same through late 2016. It was highest in 2017, when 44 percent reported borrowing money, and it decreased slightly by 2019 to 39 percent. The increases in borrowing roughly correspond with the timelines for reconstruction activity (Chapter 3).

Figure 6.1: Share of people who borrowed (IRM-1 base= 2,980, IRM-2 base=4,850, IRM-3 base=4,855, IRM-4 base=4,854, IRM-5 base=5,857, weighted)[1]



1 IRM-1 to IRM-4 asked about borrowing in the past six months, whereas IRM-5 asked about borrowing in the past year.

Who borrowed?

Geography: More than half of respondents (55%) residing in severely hit districts had borrowed money in the past year in IRM-5, which is well over the average for less impacted districts. Within the severely hit districts, several districts had outstanding rates of borrowing. For example, almost three-fourths (73%) of respondents residing in Ramechhap said they borrowed money in the past one year. Other districts that had more than half of respondents reporting that they borrowed money in the past year included Okhaldhunga (58%), Nuwakot (56%), Gorkha (55%), and Sindhupalchowk (53%).

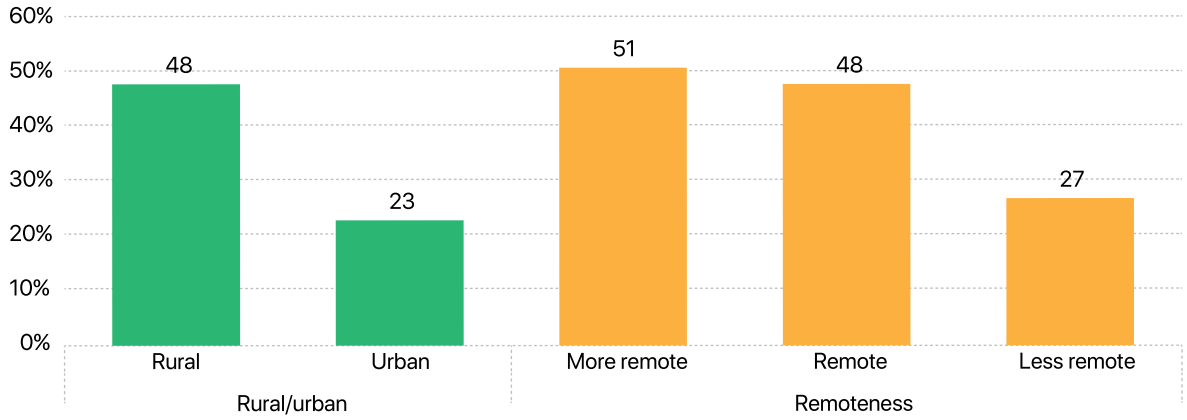
Table 6.1: Share of people who borrowed – by district impact and district (IRM-1 base= 2,980, IRM-2 base=4,850, IRM-3 base=4,855, IRM-4 base=4,854, IRM-5 base=5,857, weighted)[2]

	Jun 2015 (IRM-1)	Feb-Mar 2016 (IRM-2)	Sep 2016 (IRM-3)	Apr 2017 (IRM-4)	Sep-Oct 2019 (IRM-5)
	%	%	%	%	%
Overall	***14***	***32***	***32***	***44***	***39***
Severely hit	**24**	**49**	**43**	**55**	**55**
Dhading	25	52	48	64	47
Gorkha	17	45	36	52	55
Nuwakot	14	43	34	54	56
Ramechhap	40	63	59	55	73
Sindhupalchowk	30	46	42	49	53
Crisis hit	**11**	**22**	**25**	**39**	**31**
Bhaktapur	11	22	14	40	32
Kathmandu	9	19	23	36	29
Okhaldhunga	30	66	66	72	58
Hit with heavy losses	**10**	**24**	**24**	**21**	**27**
Lamjung	7	21	23	18	29
Solukhumbu	15	29	26	27	24
Hit	**4**	**43**	**45**	**51**	**38**
Syangja	4	43	45	51	38

In IRM-5, those in urban areas were nearly half as likely to have borrowed (23%) compared to people in rural areas (48%). People living in less remote areas tended to be less likely to borrow than people in remote and more remote areas (27%). About half of those in remote (48%) and more remote (50%) areas said they had borrowed, compared to about three in ten (27%) in less remote areas. In all IRM surveys, those in less remote areas were less likely to have borrowed money than those living in remote and more remote areas.

2 IRM-1 to IRM-4 asked about borrowing in the past six months whereas IRM-5 asked about borrowing in the past year.

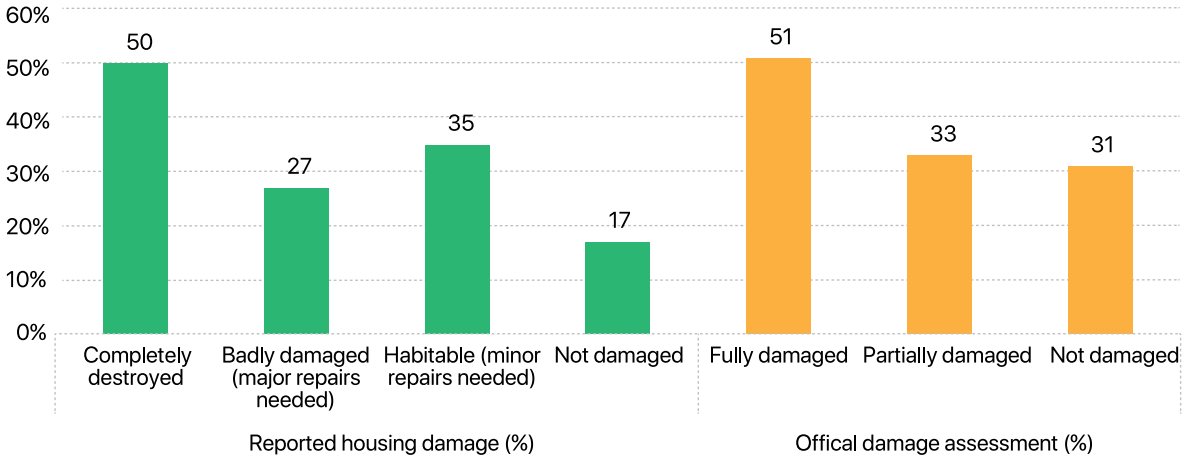
Figure 6.2: Share of people who borrowed – by urban/rural and remoteness (IRM-5 base=5,857, weighted)



Demographic groups: Hill Dalits were the most likely to report borrowing in the past year across caste/ethnic groups by at least 10 percentage points (53% of Hill Dalits, 42% of Hill ethnic groups, 42% of Hill castes, and 29% of Newars reported borrowing in the past year). The likelihood of borrowing decreased as income increased in all IRM surveys. In IRM-5, 52 percent of those in the low income group and 46 percent of those in the middle income group reported having borrowed in the past year, compared to only 32 percent in the high income group saying they had borrowed. People engaged in agriculture were the most likely to have borrowed in the past year (48%), followed by those in business (35%), those who stay at home (35%), those in service (32%), and those in labor (32%).

Housing damage: Borrowing seemed to be related to housing damage. Half (50%) of those who self-reported that their houses were completely destroyed had borrowed in the past year, compared to fewer people who said their houses had major damage (27%), minor damages (35%), or was not damaged at all (17%). Similarly, people whose houses were classified as being fully damaged were more likely to have borrowed (51%) than those whose houses were assessed as partially damaged (33%) or not damaged (31%) houses.

Figure 6.3: Share of people who borrowed money in the past year – by housing damage (IRM-5, base=5,857)



Amounts borrowed

The average amount borrowed was highest in IRM-5, at NPR 391,864, (USD 3,335) on average—a threefold increase since IRM-1. The rate of change in the amount borrowed was highest between IRM-1 and IRM-2 (Table 6.2) when there was a huge increase in amounts borrowed. Between IRM-2 and IRM-3, there was a decrease – likely as people in this period started receiving housing grants or were waiting to receive their grants. The rate of change in amount borrowed increased again between IRM-3 and IRM-4 (by 70%) as well as between IRM-4 and IRM-5 (by 8%) (Table 6.2).

Table 6.2: Rate of change in amounts borrowed (IRM-1 base=342, IRM-2 base=1,859, IRM-3 base=1,554, IRM-4 base=2,125, IRM-5 base=2,285, weighted [3]

Jun 2015 (IRM-1)	% Change (IRM1 to IRM-2)	Feb-Mar 2016 (IRM-2)	% Change (IRM-2 to IRM-3)	Sep 2016 (IRM -3)	% Change (IRM-3 to IRM-4)	Apr 2017 (IRM -4)	% Change (IRM-4 to IRM-5)	Sep-Oct 2019 (IRM-5)
103.057	194	303.130	-30	213.451	70	363.193	8	391.864

Borrowing in IRM-5 was higher in urban areas (NPR 541,811/ USD 4,611) than in rural areas (NPR 356,117/ USD 3,030). The amounts borrowed continued to be highest in the two urban districts of Kathmandu (NPR 674,847/ USD 5,743) and Bhaktapur (NPR 592,772/ USD 5,044). These amounts were significantly higher than what was reported in other districts, regardless of impact levels. The average loan size in less remote regions appears to have spiked in IRM-5 and seems to be higher than in other areas. Since IRM-4, the amount of money borrowed for respondents residing in less remote areas increased quite significantly from NPR 402,768 (USD 3,427) in IRM-4, to NPR 598,595 (USD 5,094) in IRM-5. On the other hand, the average loan amount borrowed by respondents residing in remote and more remote areas slightly declined since IRM-4 (Table 6.3).

Table 6.3: Average borrowing in NPR – by district impact, district and rural/urban (IRM-5, base=2,285, weighted)

District impact and district	**Severely hit**	**237,891**
	Dhading	308,638
	Gorkha	242,495
	Nuwakot	278,760
	Ramechhap	218,228
	Sindhupalchowk	207,662
	Crisis hit	**604,112**
	Bhaktapur	564,184
	Kathmandu	659,148
	Okhaldhunga	193,273
	Hit with heavy losses	**250,013**
	Lamjung	229,745
	Solukhumbu	354,278
	Hit	**285,246**
	Syangja	285,246
Rural/urban	Rural	356,117
	Urban	541,811

3 IRM-1 to IRM-4 asked about borrowing in the past six months, whereas IRM-5 asked about borrowing in the past year.

Findings also showed that people who had fully rebuilt/repaired their house (NPR 476,723/ USD 4,057) and those who were in the process of repairing/rebuilding (NPR 487,312/ USD 4,147) had larger loans than those who had not yet started to rebuild/repair (NPR 346,951/ USD 2,952). Respondents with higher incomes borrowed larger sums than those with lower incomes (Table 6.4).

Table 6.4: Average borrowing in NPR – by status of housing recovery and income (IRM-5, base=2,285, weighted)

Status of housing recovery	Fully rebuilt/repaired house, live in it	268,349
	Fully rebuilt/repaired house, do not live in it	239,268
	Started to rebuild/repair house, live in it	331,189
	Started to rebuild/repair house, do not live in it	301,268
	Not yet started to rebuild/repair	234,779
Income	Low	198,169
	Medium	298,627
	High	569,491

Sources of lending

People who had borrowed money were also asked for their lending source.[4] Cooperatives continued to be the most commonly named lender (25%). Other sources cited were savings and credit groups (19%), relatives (18%), and neighbors (18%). Immediately after the earthquake, relatives were the most common source of loans, but in later years, borrowing from cooperatives became more common. Similar shares mentioned borrowing from banks in all IRM surveys (Table 6.5). IRM-5 also asked if people had borrowed from the government's loan scheme for earthquake-affected households, but zero percent said they had made use of this scheme.

The borrowing sources listed above can be divided into informal sources (moneylenders, friends, relatives, neighbors, and other individuals) and formal sources (banks, savings and credit groups, cooperatives, and other financial institutions). In the year immediately following the earthquake, more people borrowed from informal institutions, but by the third round of data collection, IRM-3 (Sept 2016—one and a half years after the earthquake), people had shifted to more formal institutions. For example, borrowing from friends and relatives had decreased over time, while borrowing from cooperatives and banks had more than doubled (Table 6.5).

4 Borrowing in the past six months for rounds IRM-1 to IRM-4, and borrowing in the past year for IRM-5.

Table 6.5: Sources of borrowing among those who borrowed (IRM-1 base=342, IRM-2 base=1,859, IRM-3 base=1,554, IRM-4 base=2,125, IRM-5 base=2,285, weighted)

	Jun 2015 (IRM-1)	Feb-Mar 2016 (IRM-2)	Sep 2016 (IRM-3)	Apr 2017 (IRM-4)	Sep-Oct 2019 (IRM-5)
	%	%	%	%	%
Cooperatives	7	15	23	27	25
Savings and Credit group	17	18	20	17	19
Relative	31	24	13	19	18
Neighbor	18	17	19	17	18
Bank	2	13	13	13	15
Money lender	13	10	12	11	12
Friend	12	9	7	12	6
Other financial institution	1	5	2	2	2
Other individual from ward	1	2	1	1	1
Government loan scheme to earthquake-affected people	-	-	-	0	0

Sources of lending differed between rural and urban areas. People in rural areas were more likely than those in urban areas to borrow from money lenders (14% in rural, compared to 5% in urban) and neighbors (21% in rural, compared to 5% in urban). On the other hand, people in urban areas were more likely to turn to cooperatives (38% in urban, compared to 21% in rural) or friends (11% in urban, compared to 5% in rural). Less commonly used lending sources in both urban and rural areas were savings and credit groups (19% in rural areas, compared to 16% in urban areas), relatives (18% in rural and 19% in urban), and banks (14% in rural, and 17% in urban). Shares who borrowed from other, less common, sources of lending were similar in rural and urban areas.

Although loan amounts varied widely each year by lending source, the average loan amount increased significantly between IRM-1 and IRM-5 across all lending sources (Table 6.6). Banks offered the highest value of loans (NPR 891,471/ USD 7,586) in IRM-5, followed by relatives (NPR 444,658/ USD 3,784) and cooperatives (NPR 419,814/ USD 3,572). Loan amounts were higher in urban versus rural areas by moneylenders (NPR 1,164,060/ USD 9,906 in urban, vs. NPR 263,431/ USD 2,242 in rural) and by banks (NPR 1,124,000/USD 9,565 in urban, vs. NPR 825,472/ USD 7,024 in rural). However, there were no major differences when it came to other lending sources.

Table 6.6: Average borrowing in NPR – by sources (IRM-1 base=342, IRM-2 base=1,859, IRM-3 base=1,554, IRM-4 base=2,125, IRM-5 base=2,285, weighted) [5]

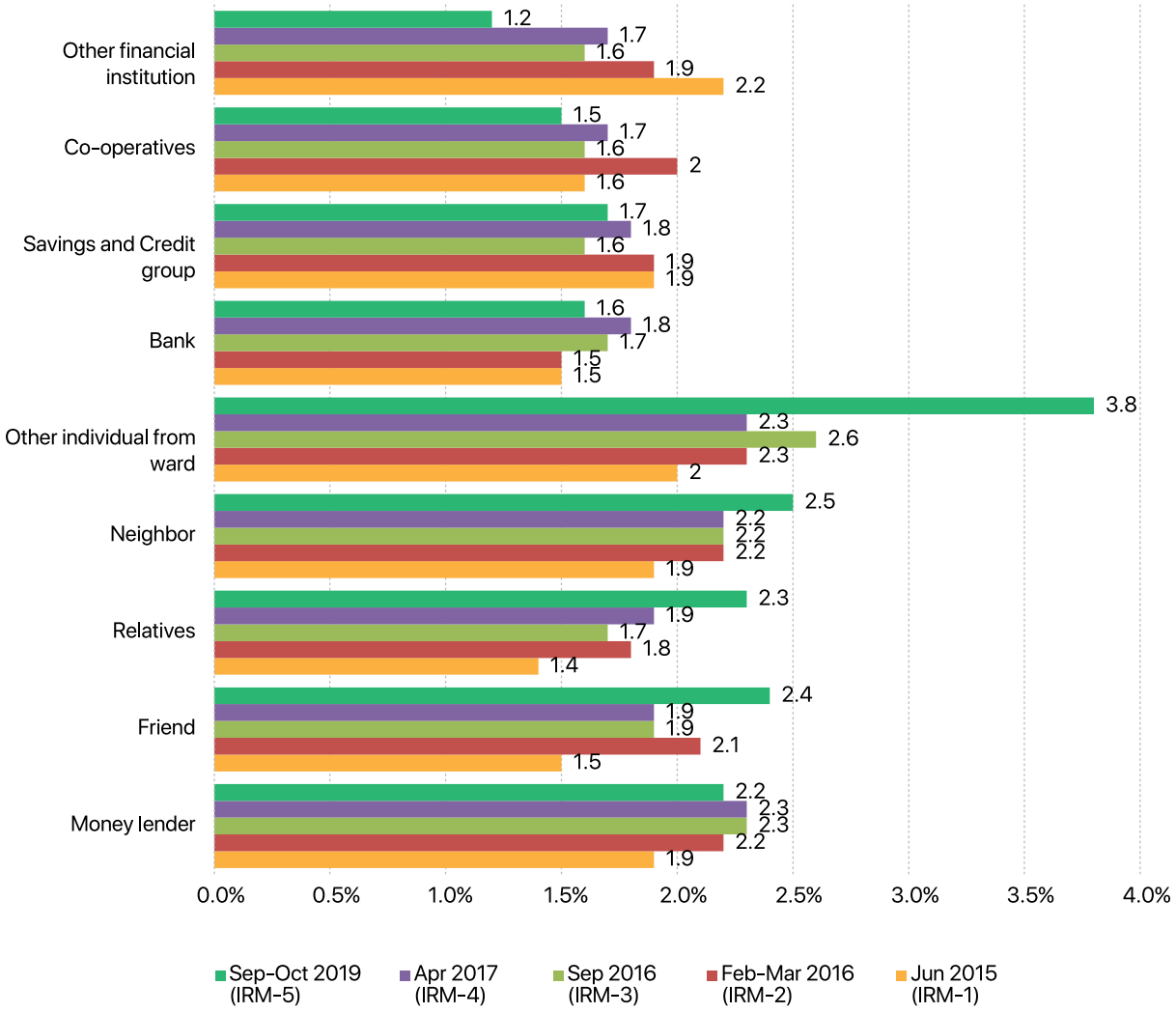
	Jun 2015 (IRM-1)	Feb-Mar 2016 (RM-2)	Sep 2016 (IRM-3)	Apr 2017 (IRM-4)	Sep-Oct 2019 (IRM-5)
Money lender	66,009	763,730	107,966	184,393	343,329
Friend	55,080	99,064	462,343	222,630	294,203
Relatives	156,562	102,836	208,144	220,932	444,658
Neighbor	123,576	103,889	103,631	149,183	214,361
Other individuals from ward	24,534	97,546	154,018	165,779	175,922
Bank	87,196	887,654	488,050	750,595	891,471
Savings and Credit group	53,888	109,503	98,616	98,378	180,199
Co-operatives	65,396	161,435	212,858	491,373	419,814
Other financial institution	11,522	130,528	484,58	119,346	265,349

5 IRM-1 to IRM-4 asked about borrowing in the past six months, whereas IRM-5 asked about borrowing in the past year. In IRM-5, only one person said they borrowed from the government loan scheme for earthquake-affected people (0% of the whole sample). The amount this one respondent had borrowed was NPR 119,033 (USD 1,013).

Monthly interest rates

Average monthly interest rates remained largely steady since the earthquake. Interest rates charged by informal sources, such as moneylenders, friends, relatives and other individuals continued to be higher than those charged by formal financial institutions (Figure 6.4). In IRM-5, interest rates charged by banks, savings and credit cooperatives, and other financial institutions ranged from 1.2 to 1.7 percent. For informal sources, monthly interest rates ranged from 2.2 to 3.8 percent.

Figure 6.4: Changes in monthly interest rates from different sources (IRM-1 base=342, IRM-2 base=1,859, IRM-3 base=1,554, IRM-4 base=2,125, IRM-5 base=2,285, weighted)[6]



Half of those who borrowed had monthly interest rates above 2 percent. Across districts, Okhaldhunga (74%) and Syangja (60%) had the highest share of people borrowing at a monthly interest rates above 2%. In Lamjung, only 22 percent reported having to pay an interest rate above 2 percent.

6 For loans taken in the past six months IRM-1 to IRM-4, and in the past year in IRM-5.

Table 6.7: Mean reported interest rates – by district impact, district, and rural/urban (IRM-5, base=2,285, weighted)[7]

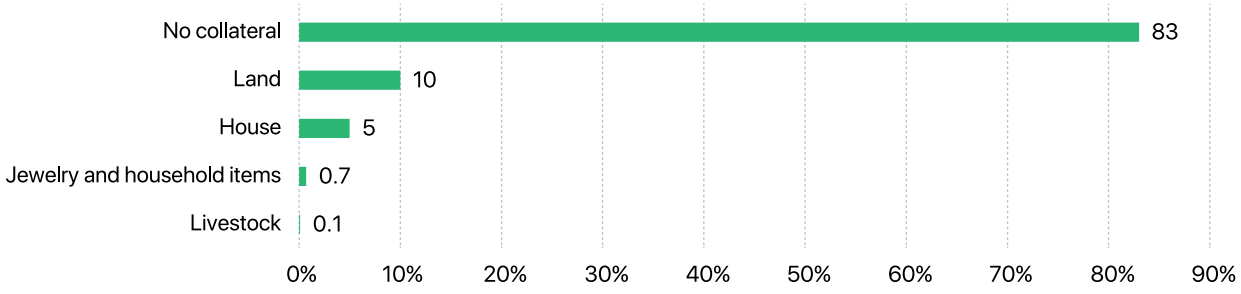
		Less than 1%	Between 1% - 1.5%	Between 1.5% - 2%	Above 2%
Overall		***2***	***23***	***24***	***51***
District impact and district	**Severely hit**	**1**	**20**	**21**	**58**
	Dhading	1	22	25	52
	Gorkha	1	20	20	59
	Nuwakot	0	16	21	63
	Ramechhap	1	10	19	70
	Sindhupalchowk	1	32	20	46
	Crisis hit	**0**	**29**	**28**	**42**
	Bhaktapur	3	52	17	29
	Kathmandu	0	29	33	38
	Okhaldhunga	1	10	16	74
	Hit with heavy losses	**28**	**22**	**12**	**37**
	Lamjung	39	27	12	22
	Solukhumbu	0	10	14	76
	Hit	**0**	**15**	**26**	**60**
	Syangja	0	15	26	60
Rural/urban	Rural	2	23	20	54
	Urban	0	26	39	35

Loan conditions

What collateral have people provided for their loans?

A large majority (83%) of people who took loans in the past year did not provide any collateral. Ten percent mentioned using their land as collateral, and even fewer mentioned putting their house as collateral, or jewelry and other household items (Figure 6.5). Those with high incomes were more likely than those with lower incomes to use land as collateral.

Figure 6.5: Collateral provided for loans taken (IRM-5, base=2647, weighted)



7 For loans taken in the past year.

People who borrowed from banks were the most likely to borrow with collateral, while nearly all who borrowed from informal sources (relatives, neighbors, or other individuals) did so without providing any collateral for the loan. The shares who put up land as collateral when borrowing from cooperatives or banks had increased over time (Table 6.8).

Table 6.8: Collateral by sources of lending (IRM-3 base=1,554, IRM-4 base=2,125, IRM-5 base=2,285, weighted)[8]

		Aug-Sep 2016 (IRM-3)	Apr 2017 (IRM-4)	Sep-Oct 2019 (IRM-5)
		%	%	%
Money lender	No collateral	86	96	97
	Land	3	2	2
Friend	No collateral	89	93	98
	Land	6	1	0
Relative	No collateral	92	99	99
	Land	1	0	1
Neighbor	No collateral	96	98	99
	Land	1	1	0
Other individual from ward	No collateral	91	95	93
	Land	7	2	4
Bank	No collateral	39	33	28
	Land	29	35	38
Savings and Credit group	No collateral	85	92	91
	Land	6	5	6
Cooperatives	No collateral	81	86	78
	Land	7	11	16
Other financial institution	No collateral	83	89	80
	Land	8	7	8

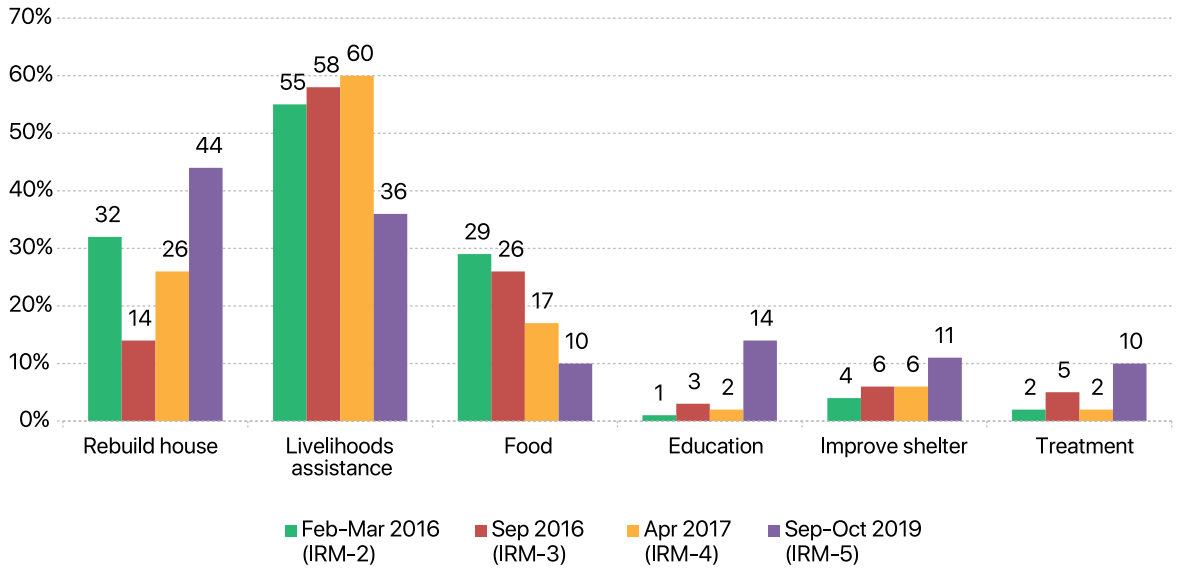
Respondents who had taken a loan in the past one year and who had provided collateral for the loan were further asked how much collateral they had provided. Most commonly, 38 percent of respondents said they had provided all of the collateral that was demanded as part of the loan condition, 31 percent said they had provided 25-50 percent of the collateral, 19 percent said they had provided less than one-quarter of the collateral, and about 12 percent said they provided over half of the collateral.

Reasons for borrowing

Over the years, there was a sharp increase in respondents who borrowed money to rebuild houses—a 12 point increase from IRM-3 to IRM-4, and an 18 point increase from IRM-4 to IRM-5. For the first time, in IRM-5, the most commonly cited reason for borrowing was to rebuild a house (44%). In previous surveys, people more often borrowed mainly to support their livelihood or for food. Livelihood support (36%) was the second most commonly given reason in IRM-5, followed by education (14%), which increased substantially for the first time from just two percent in previous IRM rounds (Figure 6.6).

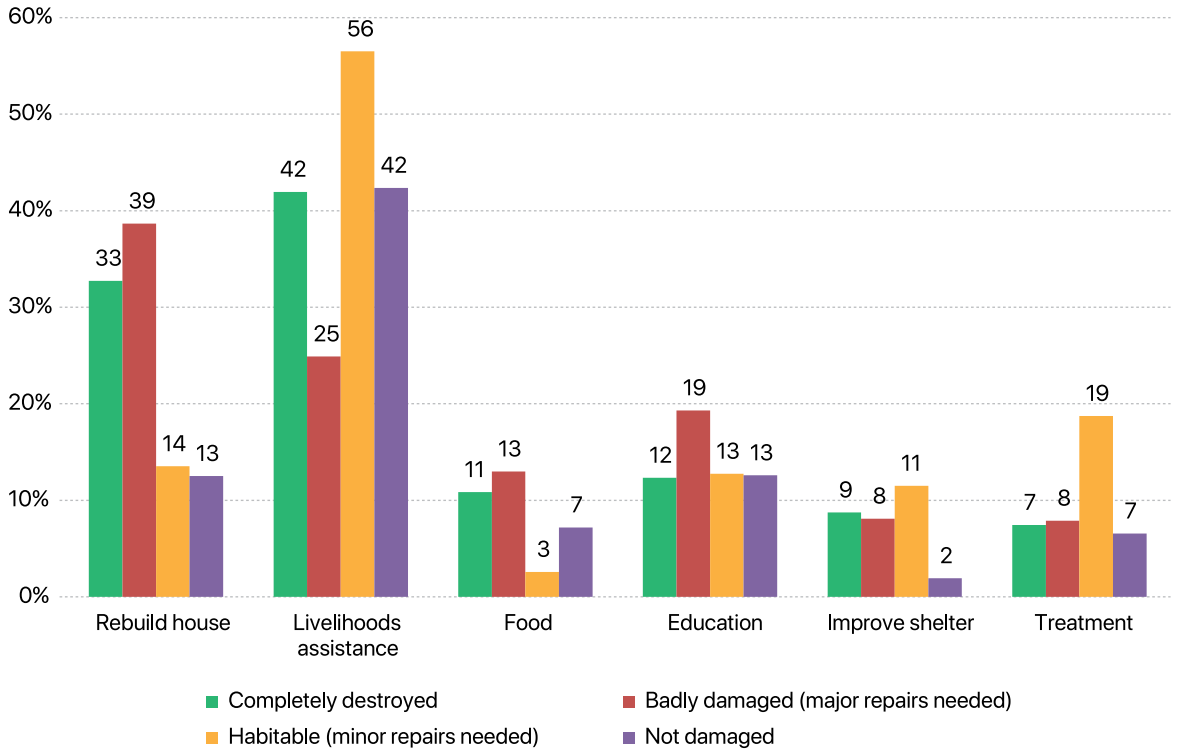
8 Most of those providing collateral said they put land as collateral. Shares providing other types of collateral were very small – too small for separate analysis here.

Figure 6.6: Reasons for borrowing (IRM-2 base = 1,859, IRM-3 base=1,554, IRM-4 base = 2,125, IRM-5 base = 2,285, weighted)



Housing damage: Those with completely destroyed and badly damaged houses were more likely to have borrowed to rebuild than those with lesser damaged houses. People in houses with minor damages were the most likely to borrow for livelihood assistance (Figure 6.7).

Figure 6.7: Reasons for borrowing – by reported housing damages (IRM-5 base=2,285, weighted)



Geography: Those in severely hit districts were more likely to borrow for rebuilding (58%), compared to people in crisis hit (31%), hit with heavy losses (46%), or hit districts (34%). Borrowing for livelihoods accounted for a larger share of borrowers in the hit (51%) and hit with heavy losses districts (38%) than in crisis hit (35%) and severely hit (33%) districts.

Rural/urban: Borrowing for reconstruction was much higher in rural (48%) than in urban areas (29%), whereas those in urban areas (43%) were slightly more likely than people in rural areas (34%) to borrow for livelihood support.

Unsuccessful borrowing

All respondents were also asked if they had tried to borrow money in the past year, but had been unsuccessful in doing so. Just 4 percent of respondents said they were unable to borrow in IRM-5, similar to past survey rounds. Across all survey rounds, the proportion of people who were unsuccessful at borrowing was lowest in IRM-3 (3%) and the highest in IRM-4 (6%). Banks (27%) and moneylenders (23%) were the most likely to refuse credit.

Respondents in the low-income bracket (6%) were twice as likely as those in the high-income bracket (3%) to report that they had tried to borrow money in the past year, but were unsuccessful. Those with medium incomes were also slightly more likely than those with high incomes to report unsuccessful borrowing. There were no differences in the response between men and women. People in more remote areas (4%) and remote areas (5%) were more likely to have been refused credit than those in less remote areas (2%). More people in severely (4%) and crisis hit (4%) districts were refused loans compared to those in lesser impacted districts (1% each).

Intention to borrow in the future

Respondents were asked if they intended to borrow money in the next three months. Just under one in ten respondents (9%) said they planned to borrow money in the next three months in IRM-5, the lowest share reported since the question was asked in IRM-2. In previous surveys, at least one in four respondents had said they planned to borrow in the near future.

Damage levels: Borrowing intention correlates highly with the level of housing damage people experienced. While 12 percent of respondents whose house was completely destroyed intended to borrow, around seven percent whose houses had suffered major damage, six percent with minor damage and only two percent with no damage expressed their intention to borrow in the next three months.

Intention to borrow was also significantly higher in more severely hit districts than in other district impact categories. While 14 percent of respondents in severely hit districts planned to borrow, only seven percent in crisis hit districts, one percent in hit with heavy losses districts, and two percent in hit districts intended to borrow in the next three months (Table 6.9). Ramechhap continued to be the district where the largest share of people (32%) planned to borrow.

Table 6.9: Intention to borrow in the next three months – by district impact, district, rural/urban and remoteness (IRM-5 base=5,857, weighted)

Overall		***9***
District impact and district	**Severely hit**	**14**
	Dhading	9
	Gorkha	16
	Nuwakot	7
	Ramechhap	32
	Sindhupalchowk	14
	Crisis hit	**7**
	Bhaktapur	15
	Kathmandu	5
	Okhaldhunga	19
	Hit with heavy losses	**1**
	Lamjung	1
	Solukhumbu	2
	Hit	**2**
	Syangja	2
Rural/urban	Rural	11
	Urban	5
Remoteness	Less remote	7
	Remote	11
	More remote	13

Income Intention to borrow money in the next three months was the highest among low-income households, followed by those with medium incomes, and was the lowest for those with high incomes. Respondents with low income (16%) were three times as likely than those with high incomes (5%), and those with medium incomes were twice as likely as those with high incomes (5%) to report that they had intentions to borrow in the next three months.

More people in more remote areas and remote areas planned to borrow money compared to those residing in less remote areas. Hill Dalits were slightly more likely than others to say that they would borrow in the next three months.

Reasons for future borrowing

Respondents who mentioned that they had an intention of borrowing money in the next three months were asked to provide reasons for why they intended to borrow. The most commonly mentioned reasons were for livelihood support (43%), to rebuild their house (29%), for education (13%), and farm inputs (11%). Around one in ten respondents who intended to borrow said it was for food (9%) or for healthcare (9%).

6.2 Debt

Household debt

In addition to asking about borrowing in the past year, respondents were also asked about the amount of their overall debt at the time of the survey. The average overall debt at the time of IRM-5 was NPR 675,157 (USD 5,745). The average size of debt was higher in urban areas and in less remote areas. Across districts, Kathmandu residents reported overall debt amounts that were significantly higher than in other districts. The overall debt incurred in Kathmandu was NPR 1,123,514 (USD 9,561), and the second highest amount of debt was NPR 836,461 (USD 7,118) in Bhaktapur. In Syangja, the overall debt was also fairly high, at NRP 518,056 (USD 4,408). In the other districts, overall debt amounts were between around NPR 340,000 (USD 2,893) to 420,000 (USD 3,574) (Table 6.10). Since livelihood was stated as one of the top two reasons for borrowing, higher borrowing in urban and less remote areas may be attributed to the higher cost of living compared to rural and more remote areas. People with higher incomes had higher debt amounts than those in lower income brackets.

Table 6.10: Average household debt in NPR – by district impact, district, rural/urban, remoteness, (IRM-5, base=5,857, weighted)

Overall		***675,157***
District impact and district	**Severely hit**	**377,691**
	Dhading	345,872
	Gorkha	405,634
	Nuwakot	342,529
	Ramechhap	421,312
	Sindhupalchowk	374,380
	Crisis hit	**997,555**
	Bhaktapur	836,461
	Kathmandu	1,123,514
	Okhaldhunga	315,513
	Hit with heavy losses	**408,380**
	Lamjung	425,083
	Solukhumbu	381,353
	Hit	**518,056**
	Syangja	518,056
Rural/urban	Rural	557,341
	Urban	1,041,467
Remoteness	Less remote	1,055,682
	Remote	516,748
	More remote	331,480

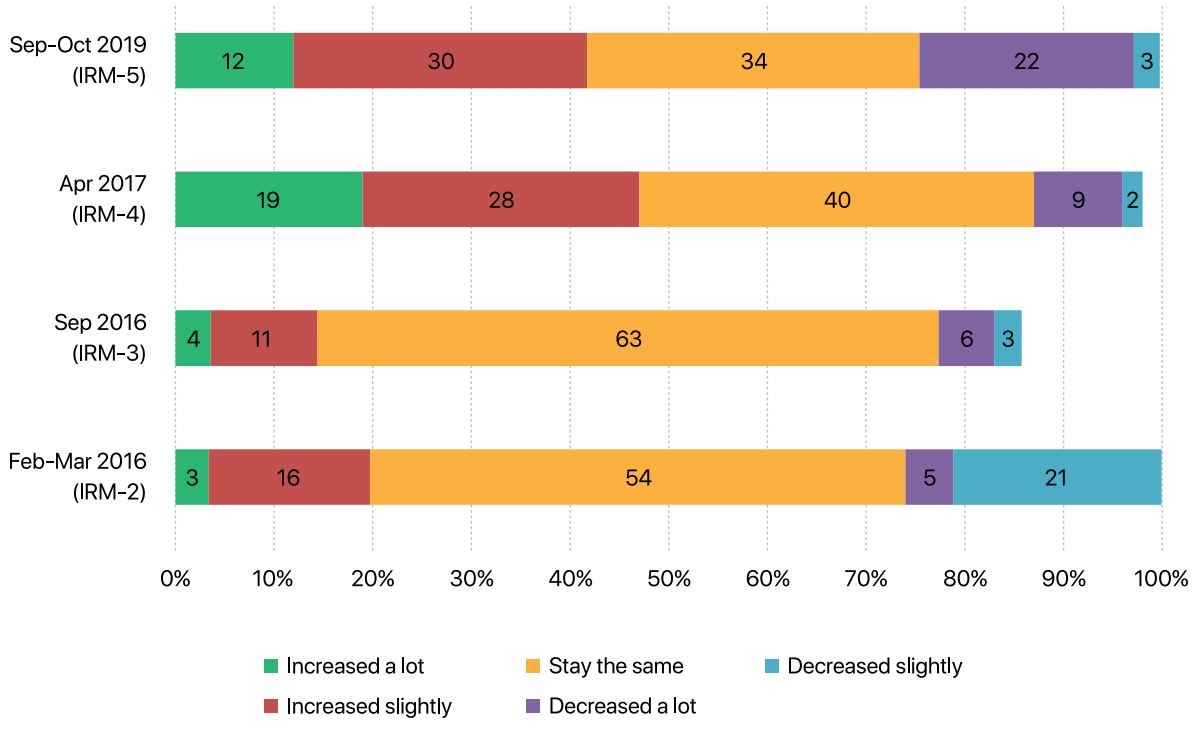
Table 6.11: Average household debt in NPR – by reported housing damages, status of housing recovery, and income (IRM-5, base=5,857, weighted)

Reported housing damage	Completely destroyed	595,439
	Badly damaged (major repairs needed)	585,674
	Habitable (minor repairs needed)	949,962
	Not damaged	802,632
Status of housing recovery	Fully rebuilt/repaired house, live in it	504,445
	Fully rebuilt/repaired house, do not live in it	940,791
	Started to repair/rebuild house, live in it	956,789
	Started to repair/rebuild house, do not live in it	573,721
	Not yet started to rebuild/repair	830,290
Income	Low income	322,559
	Medium income	411,423
	High income	1,003,468

Changes in debts over the past year

Borrowers were asked to assess their current level of debt compared to the past year. While borrowers said their debt levels were mostly similar to the last year, there were some changes over time. Compared to 2016, the share who said their overall debt had increased a lot had gone up slightly, as did those who said their debt increased slightly. The share who said it had decreased slightly also increased sharply between 2017 and 2019 (Figure 6.8).

Figure 6.8: Changes in debt over the past year (IRM-2 base = 1,859, IRM-3 base=1,554, IRM-4 base = 2,125, IRM-5 base = 2,285, weighted[9])



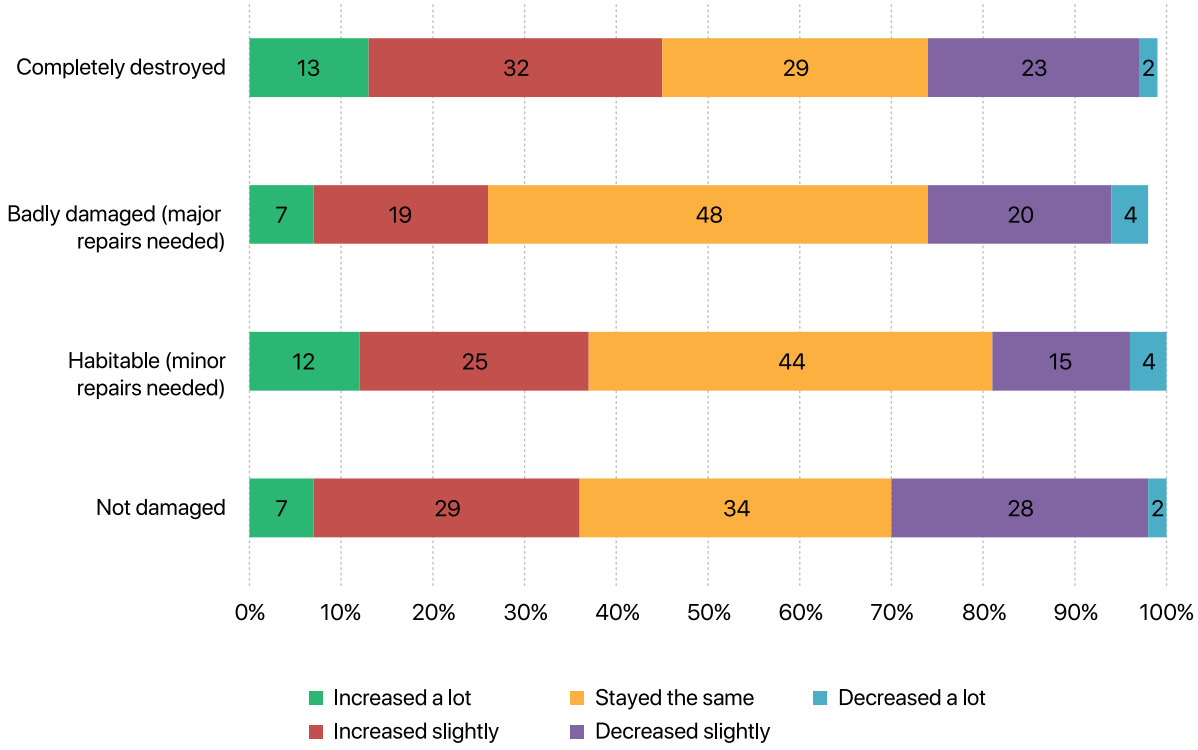
9 Remaining shares were unsure or refused to answer.

Changes in debts since the earthquake

Respondents were also asked to compare their current debt to their debt levels before the earthquake. Three in ten respondents said their debt had increased compared to before the earthquake (11% increased a lot, 20% increased slightly), one-quarter said it was the same as before (24%), one in ten said it had decreased (10% decreased slightly, 2% decreased a lot), and three in ten (32%) said they had not taken out any loans. Those with low- and medium-level incomes were more likely than those with higher incomes to say their overall debt had increased compared to before the earthquake.

An increase in debt since the earthquake was more common for people whose houses were completely destroyed. Debt increased for 45 percent of those whose houses were completely destroyed, for 26 percent of those whose houses had major damage, and for 37 percent whose houses had suffered minor damage (Figure 6.9). Thirty-six percent of households who took a loan, but had not suffered any damage reported having increasing overall debt, which suggests that rising debt is a wider problem and not solely related to the earthquake. This trend was seen in earlier analysis, which found that borrowing was prevalent not only among those with housing damage, but also among others. However, the fact that those who were the most affected were also the most likely to borrow and to have rising debt suggests that the earthquake has led to more borrowing and debt than people would have otherwise had.

Figure 6.9: Changes in debt compared to before the earthquake – by reported housing damages (IRM-5, base=5,857, weighted)



While a relatively low proportion of respondents reported decreases in debt, some districts had a larger share of respondents who said that debt levels decreased (either a lot or slightly). In Okhaldhunga, 17 percent of people reported a decrease in debt. Respondents residing in Dhading (15%), Nuwakot (15%), Kathmandu (13%), and Lamjung (13%) were also a little more likely to report that their debt decreased compared to before the earthquake.

6.3 Assets Sales

In all IRM surveys, less than 10 percent of respondents reported having sold assets (IRM-2: 4%, IRM-3: 3%, IRM-4: 6%, and IRM-5: 8%). In IRM-5, one in eight said they had sold assets – more than in previous rounds. Even though asset sale was relatively uncommon, it seemed to be linked to earthquake impacts. People in the severely hit districts were more likely to report selling assets in all IRM surveys compared to people in other areas. In IRM-5, asset sales were more common among those whose houses were completely destroyed (13%), compared to those who suffered lesser (2-4%) or no damage (0%). Those who had built/repaired a new house (and lived in it, 71%) were at least seven times more likely than those who did not yet complete rebuilding/repairing their house (nine percent or less) to have sold assets (Table 6.12).

Table 6.12: Sale of assets to cope with effects of earthquake – by reported damage, status of housing recovery, income (IRM-5, base=5,857, weighted, multiple answers possible)

Reported housing damage (%)	Completely destroyed	13
	Badly damaged (major repairs needed)	4
	Habitable (minor repairs needed)	2
	Not damaged	0
Status of Housing recovery (%)	Fully rebuilt/repaired house, live in it	71
	Fully rebuilt/repaired house, do not live in it	6
	Started to repair/rebuild house, live in it	9
	Started to repair/rebuild house, do not live in it	9
	Not yet started to rebuild/repair	5
Income (%)	Low income	9
	Medium income	9
	High income	7

In IRM-5, people in rural areas (10%) were more than twice as likely as those in urban areas to have sold assets (4%). Assets sales were also higher in more remote areas (12%) than in remote (9%) and less remote areas (5%). Residents of Ramechhap, Gorkha, and Bhaktapur were the most likely to have sold assets in the past year to cope with the impacts of earthquake (Table 6.13).

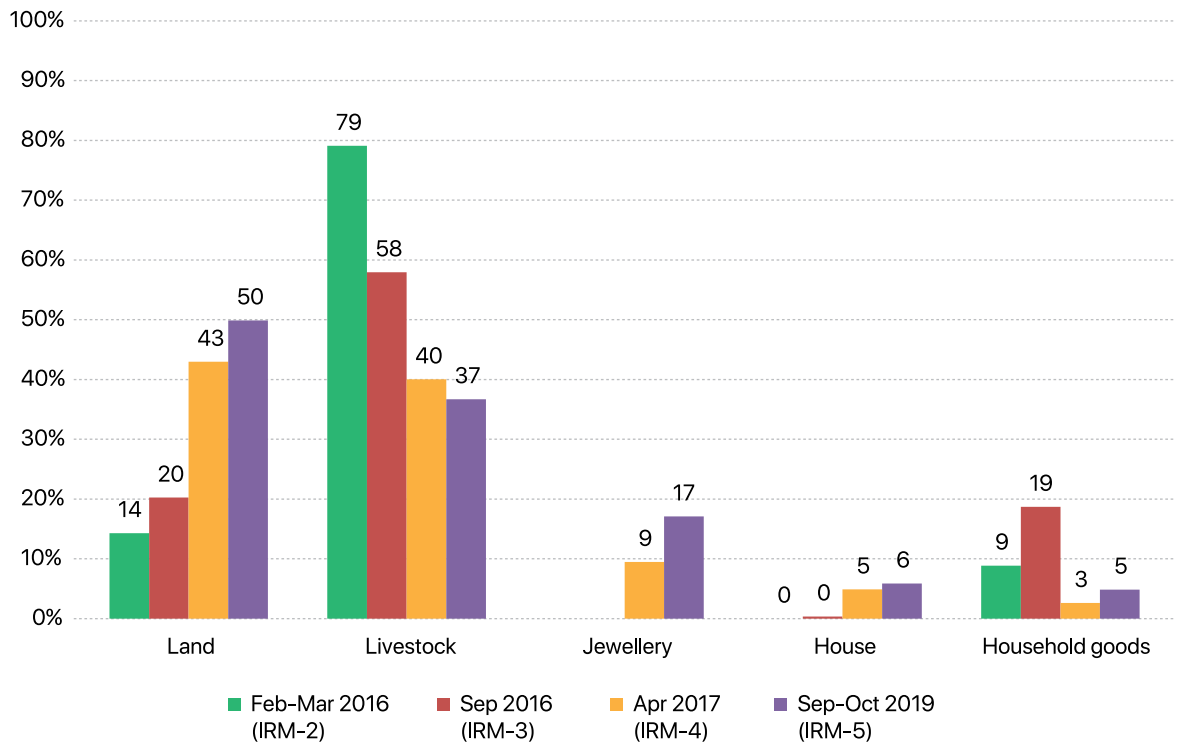
Table 6.13: Sale of assets to cope with effects of earthquake – by district impact, district, remoteness, and urban/rural (IRM-5, base=5,857, weighted, multiple answers possible)

Overall		***8***
District and district impact (%)	**Severely hit**	**10**
	Dhading	5
	Gorkha	14
	Nuwakot	9
	Ramechhap	19
	Sindhupalchowk	6
	Crisis hit	**8**
	Bhaktapur	15
	Kathmandu	7
	Okhaldhunga	5
	Hit with heavy losses	**3**
	Lamjung	3
	Solukhumbu	2
	Hit	**2**
	Syangja	2
Rural/urban (%)	Rural	10
	Urban	4
Remoteness (%)	Less remote	5
	Remote	9
	More remote	12

Types of assets sold

The majority of respondents who sold assets sold land (50%) and livestock (37%). People also sold gold (17%) and houses (6%) to cope with the earthquake's impacts. Compared to IRM-4, land sales among those who sold assets increased by seven percentage points, whereas livestock sales went down by three percentage points (Figure 6.10). For those who sold assets, land sales were cited more frequently in Bhaktapur (98%) and Kathmandu (69%). Gold sales were the highest in Sindhupalchowk and Dhading (26% each). Respondents residing in more remote areas who sold assets were the most likely to say they sold livestock, whereas those in less remote areas were more likely to say they sold land. None of the respondents in more remote areas said they sold houses.

Figure 6.10: Types of assets sold to cope with earthquake impacts (IRM-2 base=302, IRM-3 base-164, IRM-4 base=302, IRM-5 base=439, weighted, multiple answers possible)[10]



How many assets have people sold?

Respondents who said they sold a type of asset to cope with the impacts of the earthquake were further asked how much of each asset they had sold. Among those who sold land, nearly two in three said they sold less than 25 percent of the land they owned. In previous years, larger quantities of land were sold. The results were more mixed for livestock sales – as in previous surveys. However, fewer than two in ten of those who said they sold livestock said that they sold all of it in any of the IRM surveys. The quantity of household goods sold has decreased in each subsequent survey (Table 6.14).

10 One asset not mentioned here is vehicles – only four households (1% of those who sold assets) mentioned having sold vehicles.

Table 6.14: Quantity of assets sold (IRM-2 base=302, IRM-3 base-164, IRM-4 base=302, IRM-5 base=439, weighted)[11]

		Feb-Mar 2016 (IRM-2)	Sep 2016 (IRM-3)	Apr 2017 (IRM-4)	Sep-Oct 2019 (IRM-5)
		%	%	%	%
Land	All	27	3	12	3
	Over 50%	4	66	49	9
	25-50%	36	25	25	22
	Less than 25%	33	6	13	65
Livestock	All	18	15	11	19
	Over 50%	28	48	40	26
	25-50%	29	29	33	32
	Less than 25%	25	8	16	22
Household good	All	2	2	5	0
	Over 50%	17	68	62	3
	25-50%	68	30	26	91
	Less than 25%	12	0	7	5
Jewelry	All	0	0	0	7
	Over 50%	0	0	0	25
	25-50%	0	0	0	28
	Less than 25%	0	0	0	40

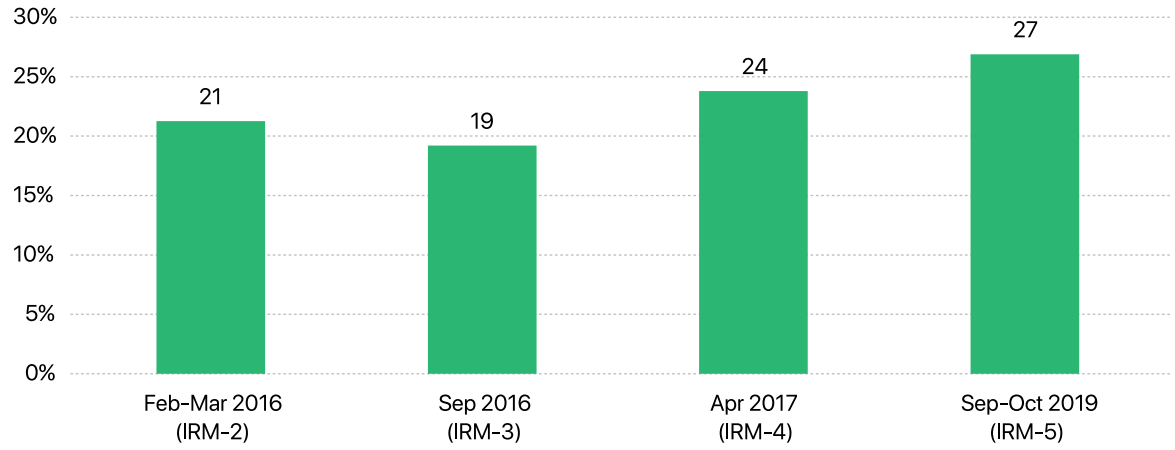
6.4 Remittances

To further understand the role of remittances in earthquake recovery, respondents were asked questions related to remittances before and after the earthquakes. Similar to previous IRM surveys, 12 percent of respondents in IRM-5 said that remittances were a main income source (10% in IRM-1, 13% in IRM-2, 14% in IRM-3, and 15% in IRM-5).

The share who reported having ever received remittances was highest in IRM-5 (27%). Four percent said they received remittances from inside the country, 19 percent from outside the country, and four percent from both inside and outside the country. In previous surveys, at least two in ten had reported getting remittances either from inside the country or abroad (21% in IRM-2, 19% in IRM-3, and 24% in IRM-4).

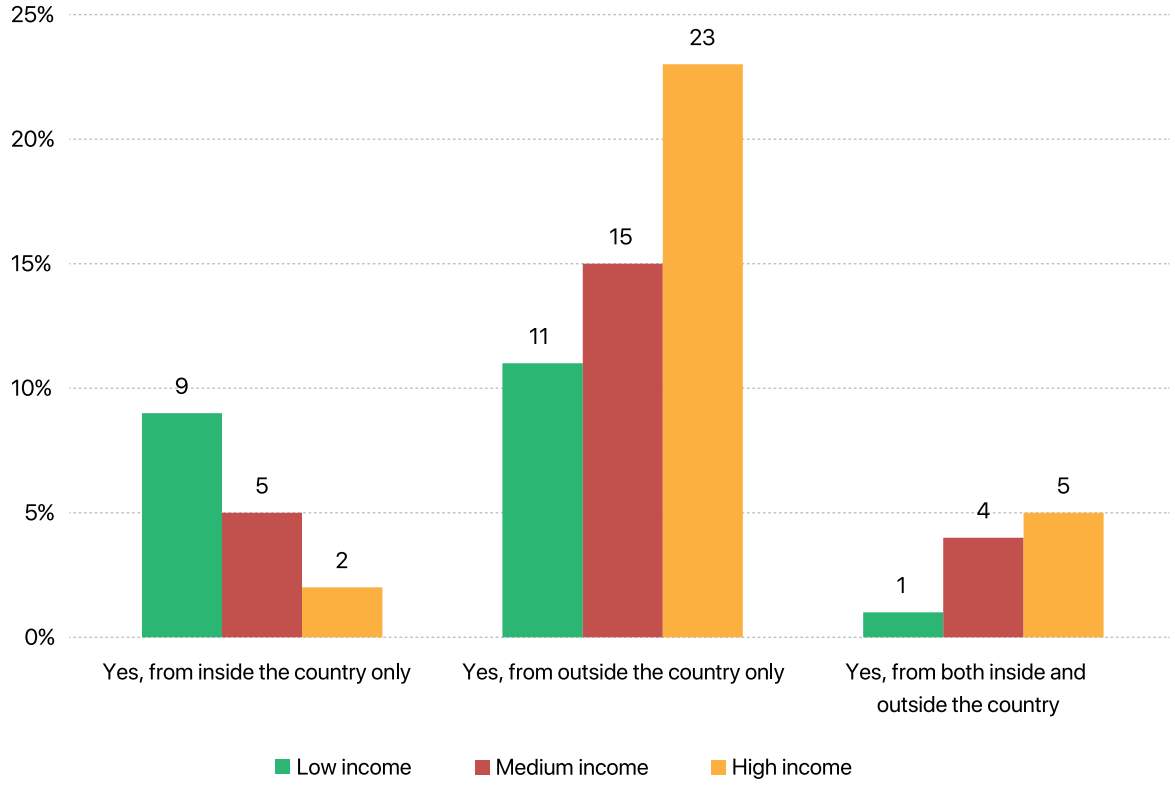
11 One asset not mentioned here is vehicles – only four households (1% of those who sold assets) mentioned having sold vehicles. All of those said they had sold less than 25% of their vehicle assets. Jewelry was not asked about separately in IRM-2 to IRM-4.

Figure 6.11: Share of people who received remittance (IRM-2 base=4,850, IRM-3 base=4855, IRM-4 base=4,854, IRM-5 base=5,857, weighted)



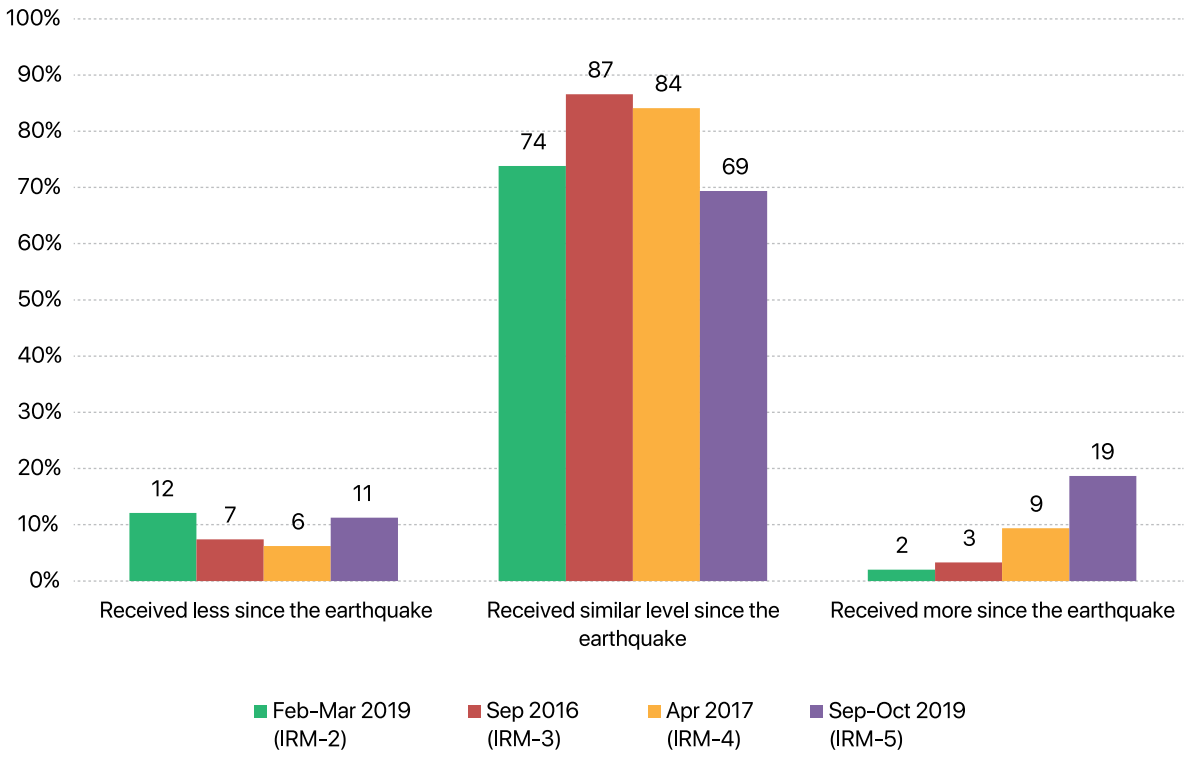
More people with higher incomes received remittances compared to others. They were especially more likely than people with lower incomes to say they received remittances from outside the country (23% compared to 11%) (Figure 6.12). People in rural areas were more likely to say they received remittances from inside the country (6%), while those in urban areas were more likely to have gotten remittances from abroad (20%). Women were slightly more likely than men to say they received remittances from outside the country (21% to 17%).

Figure 6.12: Share of people who ever received remittances – by income (IRM-5, weighted)



Generally, most respondents who received remittances said that the levels of remittances received was similar to before the earthquake, in all survey rounds. However, in IRM-5, people were slightly more likely to say that they received more remittances since the earthquake occurred (19% compared to less than 10% in previous rounds) – suggesting an increase in remittances since the earthquake (Figure 6.13).

Figure 6.13: Changes to remittances received since the earthquake (IRM-2 base=1,019, IRM-3 base=922, IRM-4 base=1,165, IRM-5 base=1,006, weighted)



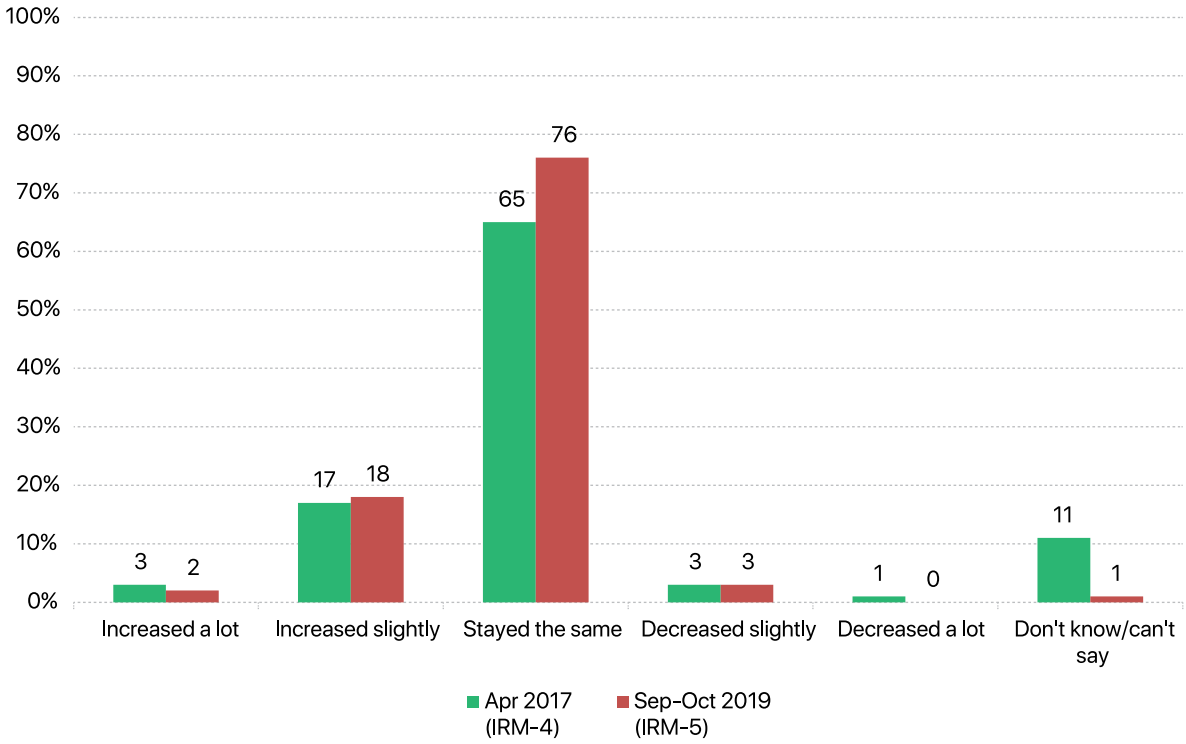
6.5 Migration

Migration in the community

Migration provides remittances, which are counter-cyclical and generally increase or remain stable after natural disasters and during economic crises and armed conflicts (Clarke and Wallsten 2003; Mahapatra et al. 2009). They are an important adaptive strategy for households during disasters. But migration also reduces the labour force needed to recover from such disasters, such as the Gorkha earthquake. Although there is an increasing body of work focusing on remittances and crisis, there is little understanding of the effect of the loss of labour, as a result of migration, on emergency and recovery needs.

The IRM surveys tracked levels of migration in the community. Migration could be an adaptive strategy after disasters, but it can also mean a loss of manpower needed to rebound from a crisis. In both IRM-4 and IRM-5, the majority of respondents said that the level of migration from their communities has stayed the same before and after the earthquake, with a higher share saying so in IRM-5 (76% in IRM-5 compared to 65% in IRM-4). Since equal shares reported an increase in migration in the community in both IRM-4 and IRM-5, this response was most likely because fewer people were unsure of levels of migration in the community compared to IRM-4, and not because migration had actually increased between the two survey rounds (Figure 6.14).

Figure 6.14: Change in migration in the community compared to before the earthquake (IRM-4 base-4,854, IRM-5 5,857, weighted)



Migration of household members

Less than 10 percent of respondents said that someone in their household migrated (defined as leaving home for at least three months) after the earthquake in all survey rounds. In IRM-5, seven percent of respondents reported that a member of their household had migrated since the earthquake. Just two percent of respondents said someone in their family planned to migrate in the coming year. Across districts, Syangja (26%), Gorkha (12%), and Sindhupalchowk (11%) residents were most likely to report someone in theor household having migrated after the earthquake. Those in rural areas (9%) were more likely to report migration in the family than people in urban areas (4%) (Table 6.15).

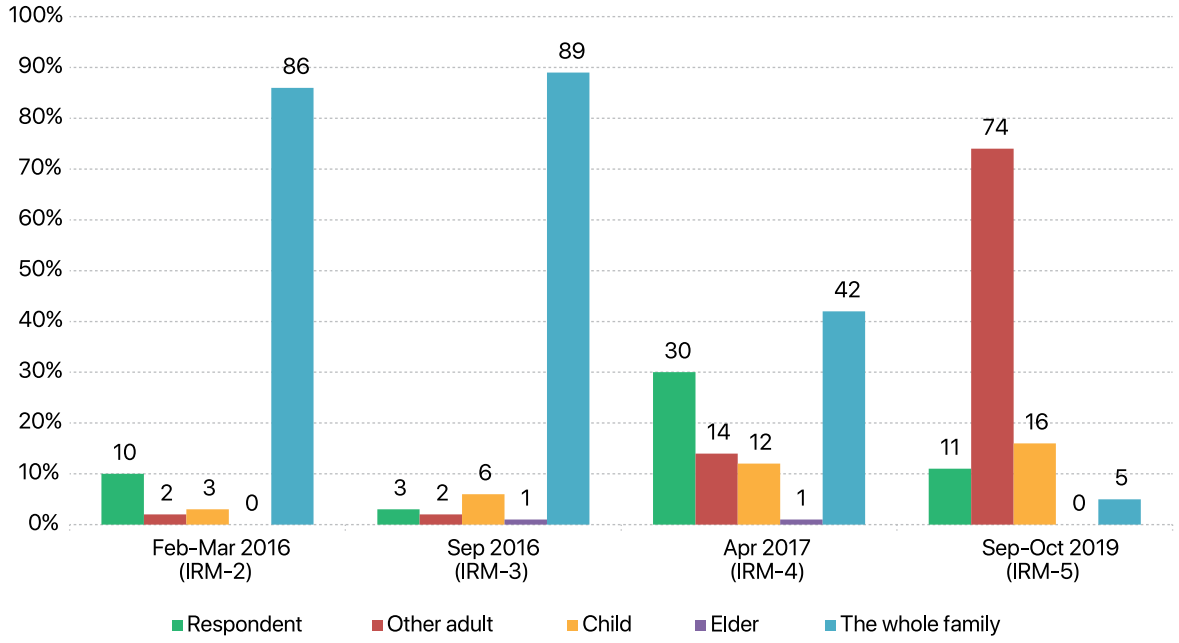
Table 6.15: Share of people who say someone in their household migrated after the earthquake – by district impact, district, urban/rural (IRM-2 base=4,850, IRM-3 base=4855, IRM-4 base=4,854, IRM-5 base=5,857, weighted)

		Feb-Mar 2016 (IRM-2)	Sep 2016 (IRM-3)	Apr 2017 (IRM-4)	Sep-Oct 2019 (IRM-5)
		%	%	%	%
Overall		***7***	***3***	***3***	***7***
District impact and district	**Severely hit**	**7**	**4**	**5**	**7**
	Dhading	2	2	9	1
	Gorkha	12	4	2	12
	Nuwakot	3	1	6	7
	Ramechhap	2	4	4	6
	Sindhupalchowk	13	9	3	11
	Crisis hit	**10**	**3**	**1**	**5**
	Bhaktapur	11	9	2	2
	Kathmandu	10	3	1	6
	Okhaldhunga	9	1	7	3
	Hit with heavy losses	**4**	**1**	**3**	**2**
	Lamjung	5	2	3	3
	Solukhumbu	2	0	3	2
	Hit	**1**	**1**	**1**	**26**
	Syangja	1	1	1	26
Rural/urban	Rural	7	3	3	9
	Urban	9	5	1	4

In IRM-5, migration did not seem to correlate to housing damage. Among those with completely destroyed houses, six percent said someone in their family migrated, compared to 12 percent with badly damaged houses, nine percent with partially damaged houses, and four percent with no damage. Respondents with higher incomes (68%) were more likely to report migration of a family member since the earthquake, compared to those with middle (45%) or low incomes (36%).

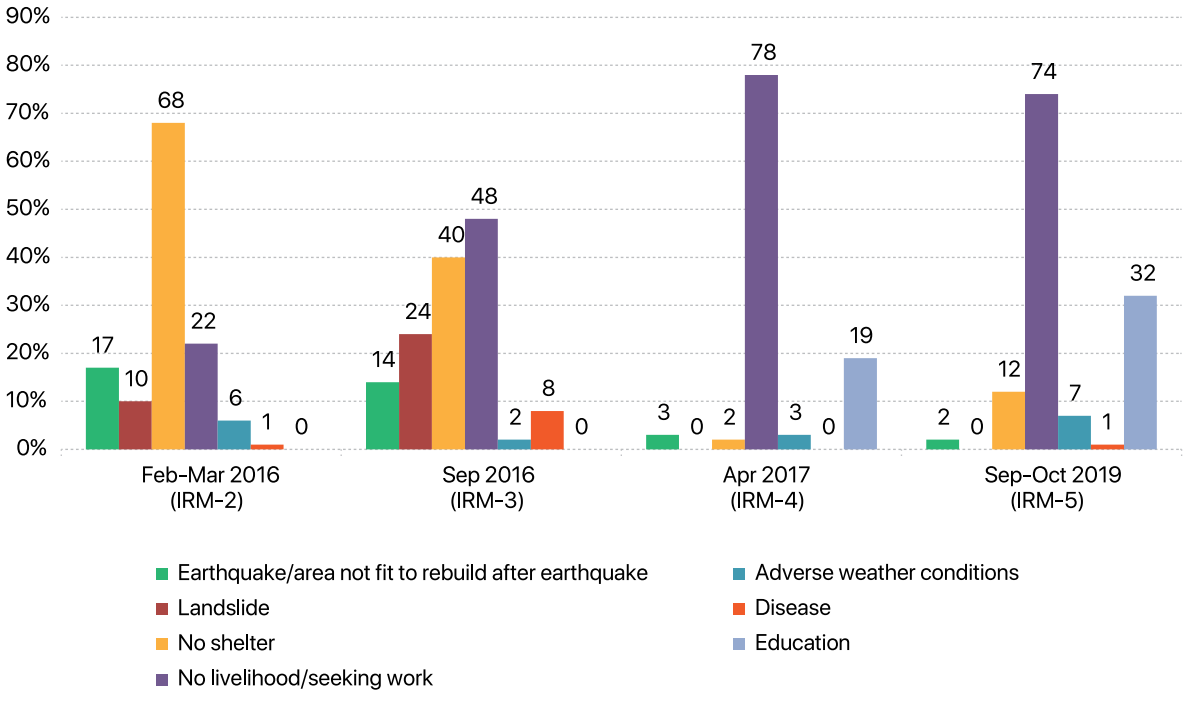
Those who reported that someone in the family had migrated were also asked which family member(s) migrated. Looking at who migrated for each survey round, there appeared to be a connection to housing damage. Up until 2016, in the early period after the earthquake when many had not yet rebuild damaged houses, entire families had migrated – meaning they had left their home for at least three months (86% in IRM-2, 89% in IRM-3). Afterwards, there was a decline in the whole family migrating (42% in IRM-4 and 5% in IRM-5) and increase in individual family members migrating – corresponding with progress in reconstruction around the same time (see Chapter 3). In IRM-5, the migrant in each family was most likely to be an adult family member (74%).

Figure 6.15: Who in the family migrated (IRM-2 base=186, IRM-3 base=158, IRM-4 base=127, IRV-5 base=417, weighted)



Further, the reasons for migration given in IRM-2 and IMR-3 were primarily lack of shelter (68% in IRM-2, 40% in IMR-3) followed by adverse geography or weather. In contrast, after the early post-earthquake period was over, the main reason for migration was work (78% in IRM-4, 74% in IRM-5). The share who mentioned education (34%) also increased in IRM-5 (Figure 6.16). Shelter-related reasons for migration explain why in earlier survey rounds, the whole family tended to migrate, while in later rounds, other adults were the migrants, as they were migrating for work or education purposes.

Figure 6.16: Reasons for migrating (IRM-2 base=186, IRM-3 base=158, IRM-4 base=127, IRM-5 base=417, weighted)



Among those who reported that a family member had migrated since the earthquake, nearly everyone (97%) said that they had temporarily migrated. Only three percent of respondents who said that a family member migrated reported that they had migrated permanently. The shares of respondents who migrated permanently were higher in Okhaldhunga (31%), Dhading (18%), and Solukhumbu (17%). People living in less remote areas (10%) were more likely to migrate permanently than remote (1%) and more remote areas (2%). Similarly, those in urban areas (9%) were more likely than those in rural areas (1%) to say migration was permanent.

Looking at migration destinations, four in ten said that their family member had migrated within the country (42%) and nearly six in ten said they had gone abroad (58%). Of those who reported that a family member had migrated since the earthquake, respondents residing in Bhaktapur (96%), Kathmandu (73%), Solukhmbu (67%), and Syangja (60%) were more likely to report that they had migrated abroad. Respondents in more remote areas and those with lower incomes who reported migration of a household member since the earthquake were more likely to mention that their family member had migrated within the country. People in rural areas had higher levels of migration within the country (45% to 28%), and those in urban areas, outside of the country (55% to 72%).

6.6 Food consumption

Respondents in each IRM survey were asked to compare their current food consumption level with that of the year before. As with previous survey rounds, most people said that their year-on-year consumption had remained the same, with around one-third saying it has increased, and nine percent reporting a decrease. Since IRM-3, the number of people who had increased their food consumption slightly doubled (16% in IRM-3 to 32% in IRM-5), while the proportion of people who maintained the same consumption level decreased steadily (75% in IRM-3 to 58% in IRM-5). The proportion of people who slightly decreased their food consumption also doubled since IRM-3 (4% to 8% in IRM-5) (Figure 6.17).

The four districts to report more than average decreases in consumption (9%) were Lamjung (16%), Okhaldhunga (16%), Gorkha (15%), and Nuwakot (12%). Those with lower incomes were only slightly more likely than the medium and high-income groups to say food consumption decreased in the last year.

Figure 6.17: Changes in food consumption in the last year (IRM-2 base=4,853, IRM-3 base=4,855, IRM-4 base=4,854, and IRM-5 base=5,857)

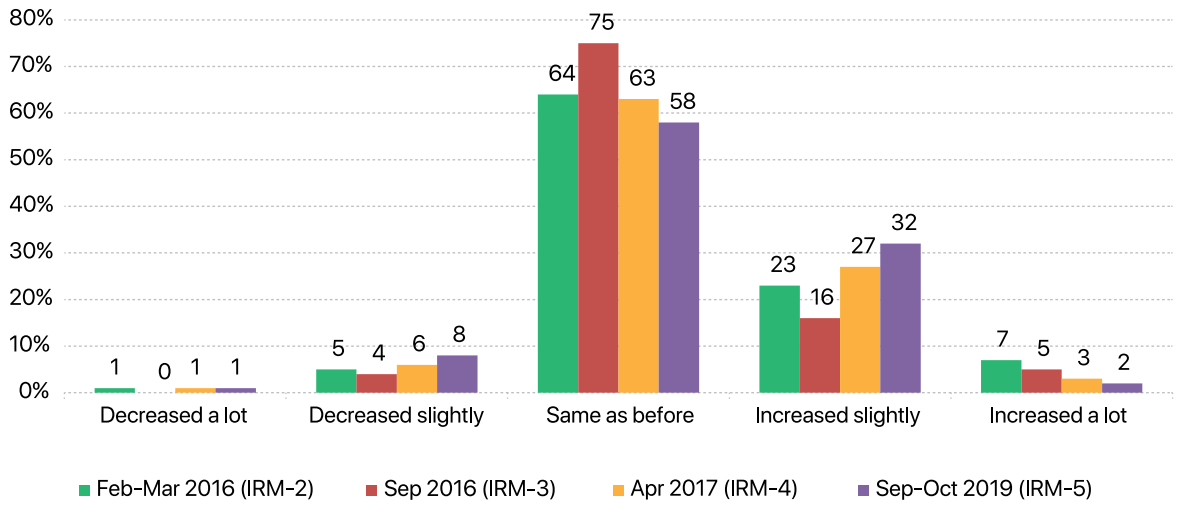


Photo: Manasi Prasai (Gorkha)

Chapter 7
Livelihoods

Photo: Manasi Prasai (Gorkha)

People's housing situation is just one measure of recovery – which is why the IRM research has also tracked impacts and recovery in other areas. This chapter looks at livelihoods and explores the earthquake's impacts on, and recovery of, income sources, as well as livelihood assistance to earthquake-affected people, and current need for livelihood support. Livelihoods recovery is a crucial part of overall recovery. As Chapter 6 shows, households severely affected by the earthquake seem to have more borrowing and increasing debt over time. Strengthening livelihoods and increasing incomes could potentially reduce the longer-term negative financial impacts of these trends.

Key findings

Impacts on income sources

- At the time of the earthquake, the majority of households in earthquake-affected areas generated income by farming their own land (59%) or through their own businesses (32%). Farming was cited most frequently as a main income source across all five survey rounds. Yet, over time, there has been a decline in the number of households generating income through farming (by 10 percentage points between 2015 and 2019) and from livestock (by seven percentage points between 2015 and 2019), as well as a simultaneous increase in households earning income from daily wages and from their own businesses.

- Those whose main household income came from their own business (76%), rent (52%), or daily wage work (43%) were most likely to say their income source was affected by the earthquake. People in government service (6%) and those who got remittances (16%) were the least likely to say so. Around one-third (33%) of those farming their own land said their household livelihood was affected.

- Among those households whose source of income was affected by the earthquake, more than half said their house was completely destroyed. This confirms that housing damage has had an impact on income sources – even five years on. Overall, 84 percent of respondents faced the double burden of having their income affected and having to repair or rebuild their damaged house. Only 16 percent of people with no housing damage said their income source was affected.

- Livelihoods have largely recovered. Nearly five years after the earthquakes, 75 to 88 percent of respondents reported improvements to affected sources of income for all types of income sources.

- Incomes seem to have remained stable when comparing income levels in late-2019 to those before the earthquake. Two-thirds of respondents (66%) said their household income has stayed the same as before the earthquake. Twenty-one percent said their income has increased (20% slightly increased, 1% increased a lot) and 14 percent said it decreased (12% slightly decreased, 2% decreased a lot).

- Only five percent said they have changed livelihood since the earthquake, but changes seem inconclusive as most households remained in the same sectors: either agriculture or business.

Livelihoods assistance

- Two in 10 respondents (18%) received some type of livelihood assistance after the earthquake, while eight in 10 (82%) said they did not receive such support. Respondents who reside in severely hit districts, rural areas, more remote areas, and those in the low-income bracket, and with low educational levels were more likely to have received livelihood support after the earthquake. Respondents who were in the process of rebuilding their house or who had finished rebuilding their house were more likely to have received livelihood assistance.

- People who received livelihood support overwhelmingly said it was useful (97%), but fewer people (77%) found the livelihood support they received to be helpful specifically for earthquake recovery.

Livelihoods needs

- Cash grants were the main livelihood support that people wanted now, with 58 percent of respondents mentioning it. A total of 47 percent said they needed some form of agricultural support (training, livestock, seeds, general support, land, or irrigation) while a total of 22 percent said they needed support for their business (business development or training). One-fourth of respondents (25%) said they did not need any livelihood support.

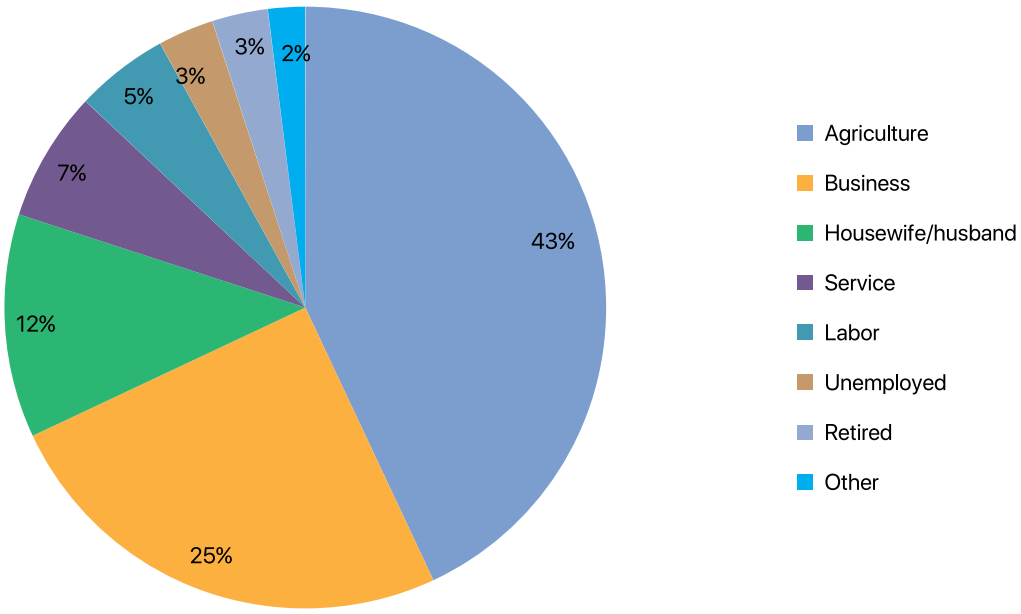
- Respondents with higher educational status and higher incomes were more likely to state that they did not currently have any need for livelihood support. Those with low incomes were almost twice as likely as those with high incomes to say they needed cash support. People with housing damage were also comparatively more likely to say they required cash grants as a form of livelihood support than those with no damage at all.

7.1 Impacts on incomes sources

Respondents' income sources

The survey asked the respondents to state their profession and any additional sources of income they might have. Four in ten (43%) mentioned agriculture as their profession and one-fourth (25%) said they were engaged in business. About seven percent were engaged in service sectors, and five percent in labor. One in ten respondents (12%) were homemakers. Secondary sources of income included agriculture (21%), small and medium enterprise (13%), labor (10%), and service (9%). However, three in ten (34%) said that they do not have any additional income sources.

Figure 7.1: Current main profession of respondents [IRM-5, weighted, base=5,857]



Household income sources at the time of the earthquake

The survey also asked about the household income sources of respondents. At the time of the earthquake, most households in affected districts farmed their own land (59%), especially in rural districts where close to 90 percent or more say one of their main sources of income was farming. Residents of rural areas said their income source at the time of earthquake was farming, livestock farming, and daily wage work in the local area, while residents of urban areas say that their main sources of income were business, salary/wage work in private company, and rent (Table 7.1).

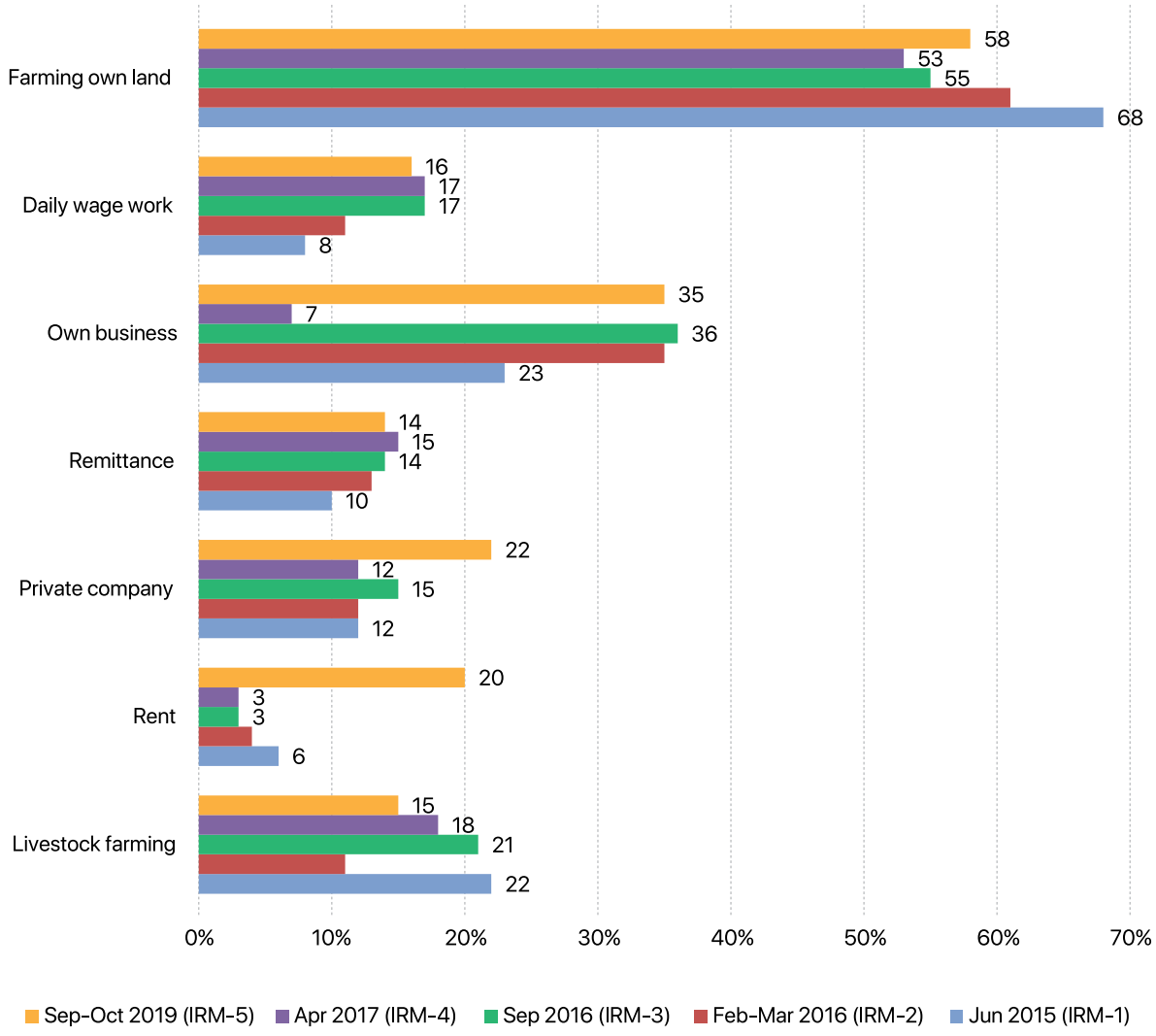
Table 7.1: Sources of income at the time of the earthquake – by district impact, district, and rural/urban (household income sources, multiple answers possible, IRM-5, weighted, base=5,857)

	Farming own land	Own business	Salary/wages in private company	Rent	Daily wage work	Livestock farming	Remittance	Government service	Pension/ Social security	Farming on others' land
	%	%	%	%	%	%	%	%	%	%
Overall	***59***	***32***	***19***	***19***	***15***	***14***	***12***	***10***	***12***	***3***
Severely hit	**94**	**12**	**9**	**1**	**22**	**27**	**12**	**6**	**9**	**4**
Dhading	94	7	11	0	13	2	9	5	8	4
Gorkha	90	18	4	1	23	26	11	6	14	6
Nuwakot	95	13	13	2	18	66	18	7	10	0
Ramechhap	97	9	5	1	23	47	11	8	10	9
Sindhupalchowk	95	14	9	1	31	7	10	6	6	4
Crisis hit	**29**	**50**	**28**	**34**	**10**	**3**	**7**	**11**	**14**	**2**
Bhaktapur	61	34	30	12	21	9	6	12	11	5
Kathmandu	19	56	30	40	8	0	7	12	14	1
Okhaldhunga	97	6	4	1	20	29	10	8	14	5
Hit with heavy losses	**90**	**14**	**8**	**1**	**23**	**10**	**24**	**14**	**10**	**5**
Lamjung	91	10	10	2	26	10	33	17	14	7
Solukhumbu	89	21	4	0	19	11	7	10	3	1
Hit	**92**	**8**	**11**	**0**	**9**	**43**	**34**	**9**	**19**	**6**
Syangja	92	8	11	0	9	43	34	9	19	6
Rural	81	21	11	8	18	21	13	11	11	4
Urban	16	53	35	39	8	2	9	7	14	2

Changes to household income sources over time

In each survey round, respondents were asked about their household's current main income source(s). Farming was cited most frequently as a main income source across all five survey rounds. Over time, however, there was a decline in the number of households generating income through farming (by 10 percentage points between 2015 and 2019) and through livestock (by seven percentage points between 2015 and 2019), as well as a simultaneous increase in households earning income from daily wages and from their own business (Figure 7.2). Livestock farming decreased noticeably immediately after the earthquake, rebounded in 2016, but has since showed an annual decline. Shares of households generating income through their own business, working for a private company, or daily wage work has increased since the earthquake. As a result of the larger urban sample in the recent IRM survey, there appears to be a larger share of households citing rent as an income source between IRM-4 and IRM-5.

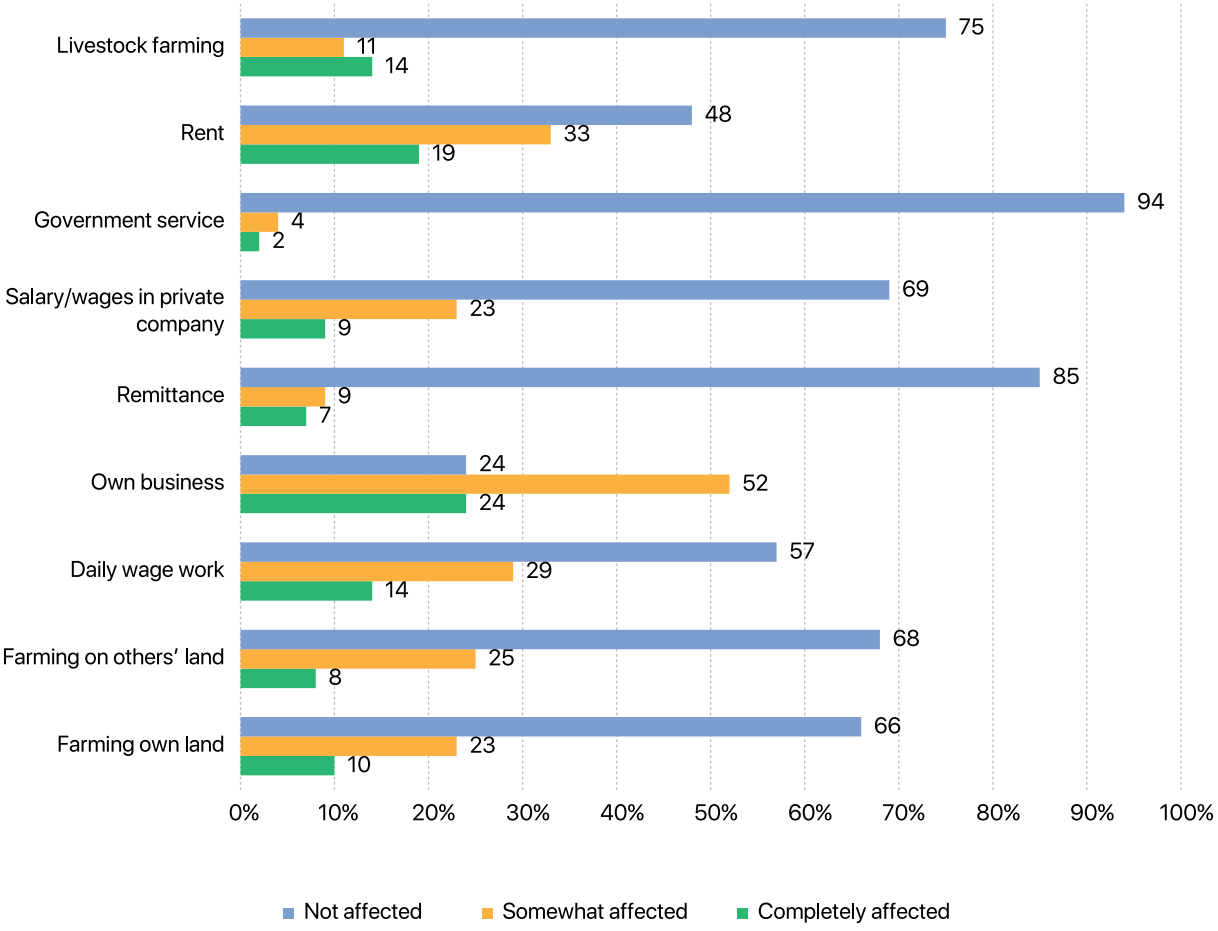
Figure 7.2: Top income sources for households from 2015-2019 (IRM-1 base=2,980, IRM-2 base=4,850, IRM-3 base=4855, IRM-4 base=4,854, IRM-5 base=5,857, weighted, multiple answers possible)



Earthquake impacts on household income sources

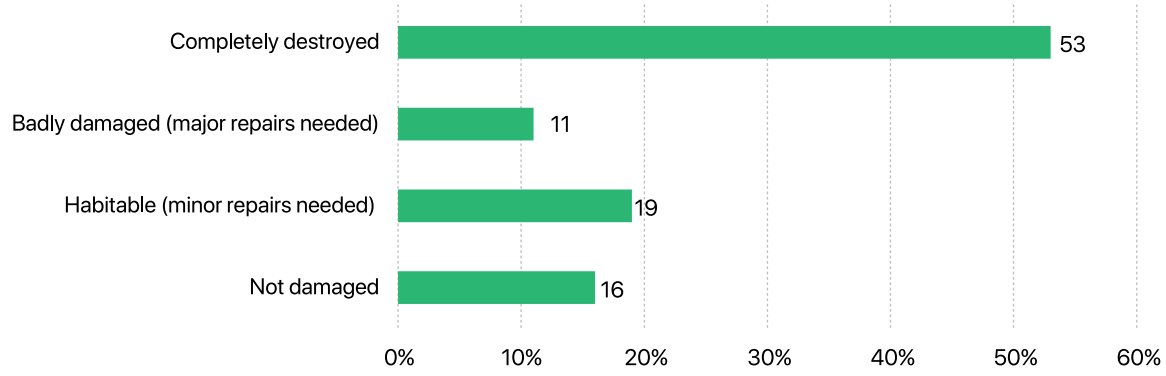
Respondents were asked whether their household's main source(s) of income at the time of the earthquake were affected by the earthquake. Those who had relied on their own business (76%), rent (52%), or daily wage work (43%) were most likely to say their livelihood source was affected by the earthquake. People in government service (6%) and who received remittances (16%) were the least likely to say their livelihoods were impacted by the earthquake. One-third (33%) of those farming their own land said their livelihood was affected.

Figure 7.3: Effect on sources of income (household income sources at the time of the earthquake, IRM-5, weighted, base=5,857)



Among those people whose source of income was somewhat or completely affected by the earthquake, more than half (53%) said their house was completely destroyed. This confirms that housing damage has had an impact on income sources – even five years on. Overall, 84 percent of respondents faced the double burden of having their income somewhat or completely affected, and also having to repair or rebuild their partially or fully damaged house. Only 16 percent with no housing damage said their income source was affected (Figure 7.4). Those with housing damage who had relied on rent or their own business for income were more likely to say their income source was affected (but they were also comparatively more likely to say their income source has since improved).

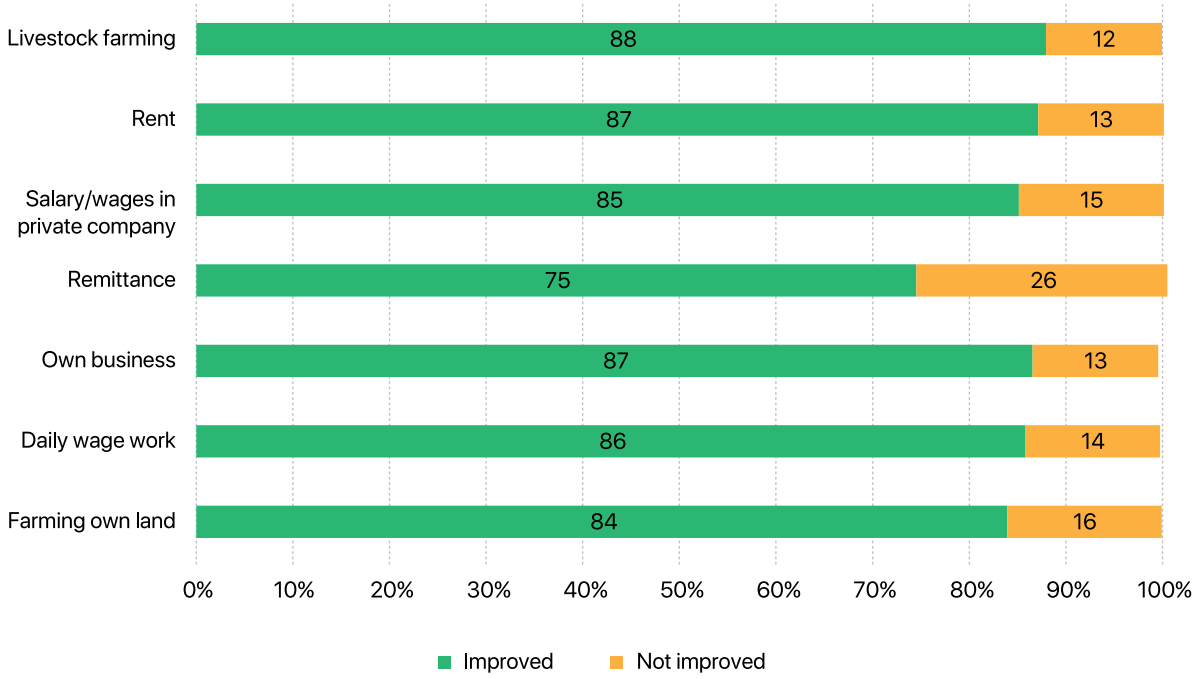
Figure 7.4: Reported housing damage for people whose livelihoods were either somewhat or completely affected by the earthquake (IRM-5, weighted, base=3,092)



Recovery of income sources

Livelihoods have largely recovered nearly five years after the earthquake. The majority of households whose pre-earthquake income sources were either somewhat or completely affected by the earthquake noted that their incomes have since improved again. Seventy-five to 88 percent of respondents reported improvements to affected sources of income nearly five years after the earthquake, across all income sources (Figure 7.5).

Figure 7.5: Shares reporting improvements to affected income sources since the earthquake (among those who said their household income source was either completely or somewhat affected by the earthquake, IRM-5, weighted, base=varies by income source)[1]



1 The base for various income sources were as follows: farming one's own land (1153), daily wages (371), own business (1434), livestock farming (208), remittance (107), salary/wages in private company (357), and rent (577). Sample sizes for other income sources were too small.

Livelihood recovery varied across districts, and between rural and urban areas. Generally, those in urban areas were more likely than those in rural areas to have seen improvements to their livelihoods since the earthquake, except for remittances and livestock farming (Table 7.2). People in Solukhumbu were less likely than others to mention improvements to farming, daily wages, or their businesses. Those in Nuwakot (91%) were the most likely, and those in Sindhupalchowk (43%) were the least likely to say remittances had improved. Nearly everyone in Bhaktapur (92%) said salaries/wages from private companies had improved, and only half said the same in Gorkha. Rent as an income source improved the most in Bhaktapur and Kathmandu, whereas livestock farming had improved the most in Ramechhap and Okhaldhunga.

Table 7.2: Shares reporting improvements to income sources – by district impact, district, and rural/urban (among those who said the income source was either completely or somewhat affected by the earthquake, IRM-5, weighted, base=varies by income source)[2]

	Farming own land	Daily wage work	Own business	Remittance	Salary/wages in private company	Rent	Livestock farming
	%	%	%	%	%	%	%
Overall	***84***	***86***	***87***	***75***	***85***	***87***	***88***
Severely hit	**83**	**89**	**80**	**70**	**73**	**48**	**87**
Dhading	86	100	73	73	86	50	45
Gorkha	86	91	74	50	49	0	84
Nuwakot	90	97	95	91	78	80	89
Ramechhap	69	82	89	68	88	50	92
Sindhupalchowk	82	84	77	43	65	29	86
Crisis hit	**93**	**90**	**88**	**69**	**88**	**88**	**89**
Bhaktapur	86	79	81	86	92	91	79
Okhaldhunga	91	94	83	83	75	0	96
Kathmandu	100	95	89	67	88	88	0
Hit with heavy losses	**64**	**58**	**52**	**44**	**87**	**0**	**100**
Solukhumbu	63	38	44	57	86	0	100
Lamjung	87	94	87	0	100	0	100
Hit	**95**	**100**	**100**	**100**	**0**	**0**	**0**
Syangja	95	100	100	100	0	0	0
Rural	83	84	80	76	69	89	88
Urban	94	91	92	69	94	86	69

Changes in levels of income since the earthquake

Two-thirds (66%) of respondents said their income stayed the same as before the earthquake. Fewer said it had increased (20% slightly increased, 1% increased a lot) or decreased (12% slightly decreased, 2% decreased a lot).

2 The base for various income sources were as follows: farming one's own land (1153), daily wages (371), own business (1434), livestock farming (208), remittance (107), salary/wages in private company (357), and rent (577). Sample sizes for other income sources were too small.

Across the 11 districts, most respondents said their income had stayed the same as before the earthquake, with the exception of Ramechhap and Lamjung. More people in Lamjung (49%) and Ramechhap (46%) reported that their incomes increased than stayed the same. Higher than average shares reported decreased incomes in Gorkha (20%), Sindhupalchowk (15%), and Kathmandu (17%). People in districts that suffered less damage were more likely to say their income increased compared to before the earthquake than those in districts with more widespread damage. However, there was also wide variation in shares who said their income increased or decreased between severely hit districts. Urban residents were slightly more likely than the overall average to note a decrease in their income, and slightly less likely to see an increase in income since the earthquake (Table 7.3).

Table 7.3: Change in income level since the earthquake – by district impact, district, rural/urban, and remoteness (IRM-5, weighted, base=5,857)

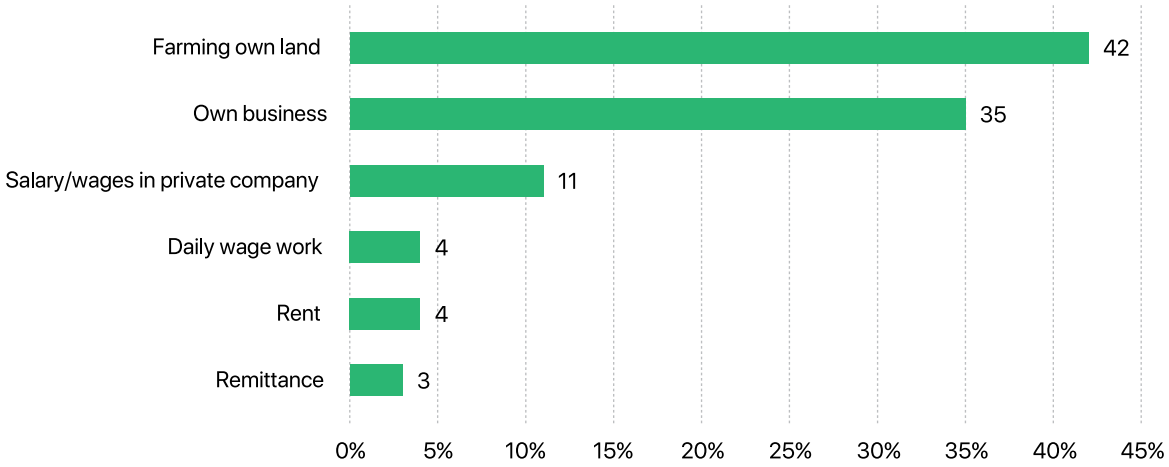
	Increased	Stayed the same	Decreased
	%	%	%
Overall	***21***	***66***	***14***
Severely hit	**22**	**65**	**13**
Dhading	12	76	12
Gorkha	17	63	20
Nuwakot	21	71	9
Ramechhap	46	44	11
Sindhupalchowk	22	63	15
Crisis hit	**17**	**67**	**16**
Bhaktapur	19	67	14
Kathmandu	17	66	17
Okhaldhunga	16	78	7
Hit with heavy losses	**35**	**60**	**4**
Solukhumbu	11	82	6
Lamjung	49	47	3
Hit	**30**	**68**	**2**
Syangja	30	68	2
Rural	22	66	11
Urban	18	65	17

Housing damages and status of housing recovery seemed to have some level of impact on income recovery. Those who said their houses were completely destroyed (18%) were slightly less likely to say incomes had increased compared to people who said their houses were badly damaged, habitable, or not damaged (23% each). Looking at housing recovery status, those who live in a partly or fully rebuilt/repaired house were comparatively more likely to say their incomes increased than those who had not yet started to rebuild/repair their house, or who had started or completed rebuilding/repairing their house, but do not yet live in it.

Have people changed their livelihood?

Only five percent of respondents said they changed their livelihood after the earthquake in IRM-5 – only slightly more than in past survey rounds (2% IRM-2, 4% IRM-3, 2% IRM-4). There was not much variation across types of livelihood sources when it came to changing to a different source after the earthquake. Looking at the current income sources of people who switched to a different livelihood source after the earthquake, most converted to farming their own land (42%) or working in their own business (35%).

Figure 7.6: Current livelihood source among those who changed their source of livelihood after the earthquake (IRM-5, weighted, base=301)



Of the five percent who reported that they changed their livelihood, most reported their family's main income source(s) to be farming their own land or running their own business at the time of the earthquake. Looking at income source at the time of the earthquake and in 2019, most seemed to have remained within the same industries, suggesting that they may have shifted the type of farming or business, but remained within those two categories. Another possibility is that the family's main income source(s) remained the same, while the respondent reported having changed his/her income source in the past four-and-a-half years. The shift in livelihoods is therefore inconclusive.

7.2 Livelihood assistance

Who received livelihood support after the earthquake?

All respondents were asked if they had received livelihood support after the earthquake. Most (82%) said they had not received any support, and some (only 18%) said they had received such support. Those in severely hit districts (44%) – particularly Gorkha (69%), Nuwakot (62%), and Dhading (43%) – were more likely to have received livelihood support than in districts that were less impacted. Few in Kathmandu (2%), Solukhumbu (2%), or Syangja (4%) reported getting livelihood support. Respondents in rural areas (25%) were far more likely than respondents residing in urban areas (4%) to report receiving livelihood support. The likelihood of having received support also increased with remoteness (Table 7.4).

Table 7.4: Share of people who received livelihood support since the earthquake – by district impact, district, rural/urban, and remoteness (IRM-5, weighted, base=5,857)

Overall (%)		***18***
District impact and district (%)	**Severely Hit**	**44**
	Dhading	43
	Gorkha	69
	Nuwakot	62
	Ramechhap	14
	Sindhupalchowk	26
	Crisis Hit	**4**
	Bhaktapur	21
	Kathmandu	2
	Okhaldhunga	9
	Hit with heavy losses	**11**
	Solukhumbu	2
	Lamjung	16
	Hit	**4**
	Syangja	4
Urban/rural (%)	Rural	25
	Urban	4
Remoteness (%)	Less remote	6
	Remote	26
	More remote	32

Respondents with low- or medium-income levels and lower educational attainment were more likely to say they received livelihood support. Hill ethnic groups and Hill Dalits were more likely than respondents from other castes/ethnic groups to report that they received livelihood support (Table 7.5). Those engaged in agriculture (31%) were more likely to report having received livelihood support. People depending upon social security allowances (only 4 percent of total sample) also said they got livelihood support (36%).

People who said their houses were completely destroyed (30%) were more likely than those who suffered less damage to say that they received livelihood support. Respondents who were in the process of rebuilding their house (35%) and those who had completely rebuilt their house (29%) were more likely to say that they had received livelihood support after the earthquake than those who had completed repairing, were in the process of repairing, or those who had done nothing (Table 7.5).

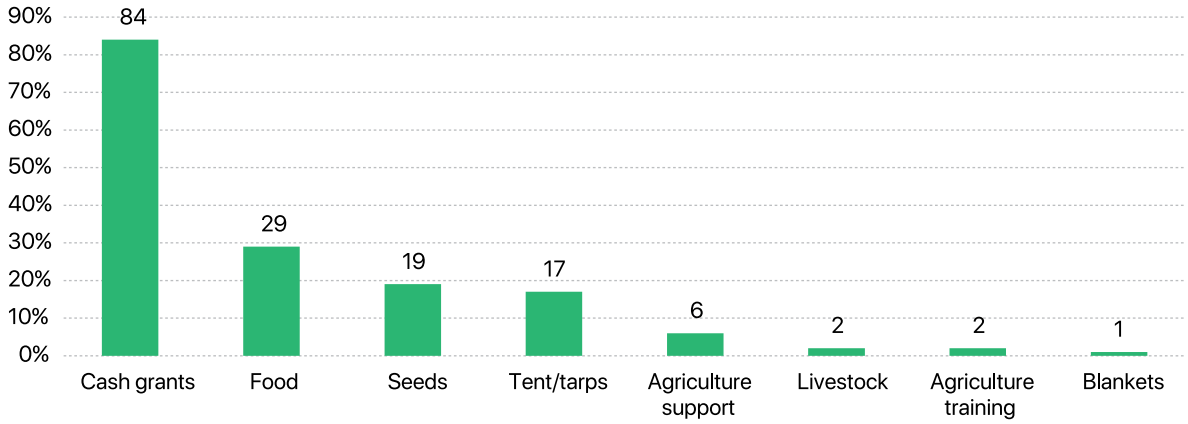
Table 7.5: Share of people who received livelihood support – by education, caste/ethnicity, income, and status of the housing recovery (IRM-5, weighted, base=5,857)

Overall (%)		***18***
Education (%)	Illiterate	30
	Literate	21
	Primary Level	22
	Lower Secondary Level	13
	Secondary Level	14
	SLC Pass	9
	+2/Intermediate Pass	8
	Bachelor Pass	5
	Master & Above	0
Caste/ethnicity (%)	Hill castes	13
	Hill ethnic groups	29
	Hill Dalit	25
	Newar	10
Income (%)	Low	28
	Medium	27
	High	10
Status of housing recovery (%)	Fully rebuilt/repaired house, live in it	29
	Fully rebuilt/repaired house, do not live in it	35
	Started to repair/rebuild house, live in it	10
	Started to repair/rebuild house, do not live in it	7
	Not yet started to rebuild/repair	10

What types of livelihood support did people receive?

Respondents were asked to name the different items they received for livelihood support. The majority (84%) of those who received livelihood support received it in the form of cash grants. Others mentioned receiving food (29%), seeds (19%), and tents/tarps (17%). Far fewer received other types of livelihood assistance, such as training, agricultural support, and livestock (Figure 7.7).

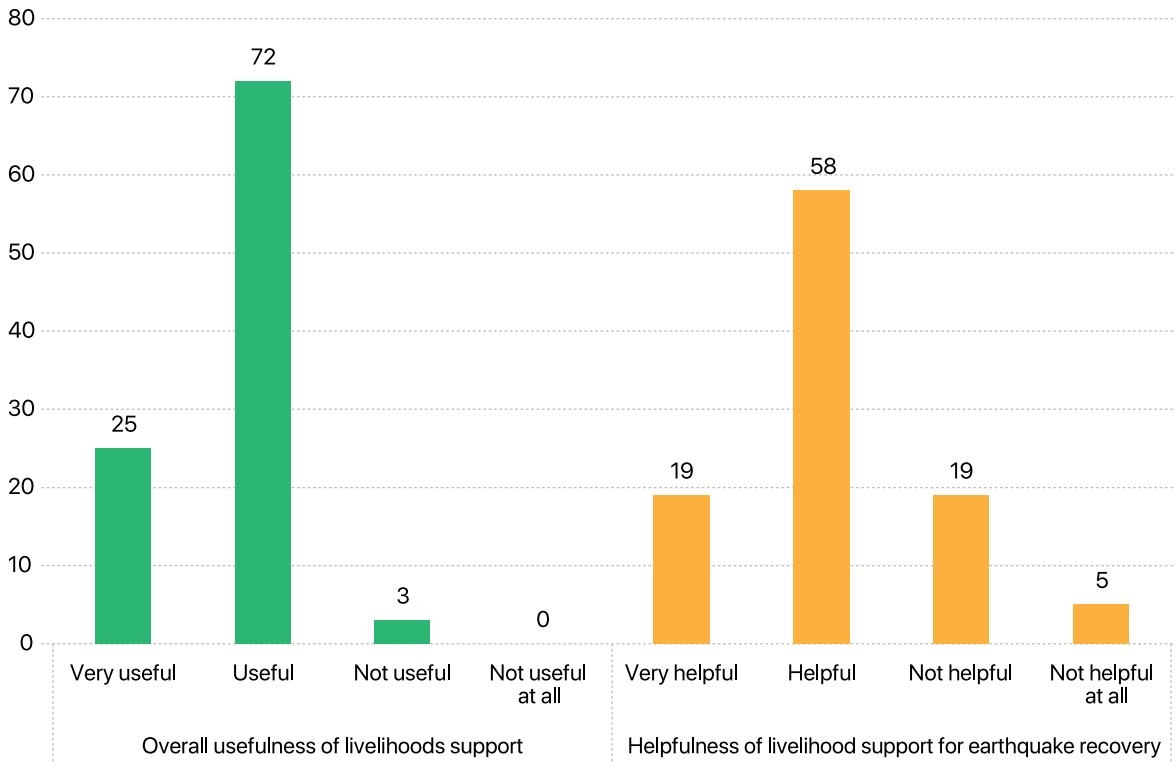
Figure 7.7: Types of livelihoods support received (IRM-5, weighted, base=1,041)



Usefulness of livelihood support

Respondents who received livelihood assistance were asked to rate how useful the support was, and if it helped them recover from the earthquake. Nearly everyone said the assistance was useful, with one-fourth (25%) saying it was very useful, and seven in ten (72%) saying it was useful. However, fewer thought the livelihood assistance was helpful for earthquake recovery—77 percent found it helpful for earthquake recovery compared to 97 percent who found the assistance generally useful. One quarter felt that the assistance was not helpful for earthquake recovery (19% not helpful, 5% not helpful at all).

Figure 7.8: Usefulness of livelihood support and helpfulness for earthquake recovery (IRM-5, weighted, base=1,041)

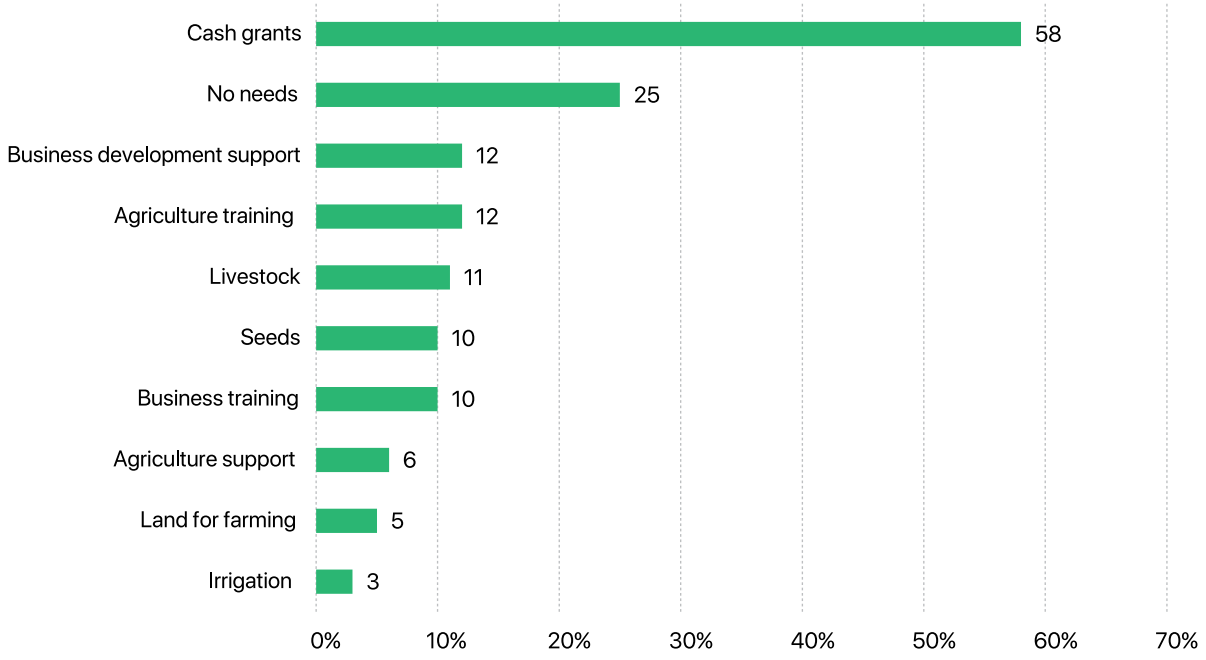


7.3 Livelihood needs

What are the main livelihood needs now?

People were asked to list their main livelihood needs now. One-fourth (25%) of respondents said they did not have any need for livelihood support, while a majority (53%) said they needed cash inputs. Far smaller shares needed other types of assistance, such as business development support (12%), agriculture training (12%), livestock (11%), seeds (10%), business training (10%), or other types of support. However, a combined total of 47 percent said they needed various types of agricultural support (training, livestock, seeds, general support, land, irrigation) compared to 22 percent who said they needed support for their business (business development or training).

Figure 7.9: Main livelihood needs (IRM-5, weighted, base=5,857, multiple answers allowed)



Livelihood needs across locations: Across all districts, the most-cited livelihood need was cash. In Solukhumbu, Okhaldhunga, Ramechhap, and Sindhupakchowk large shares are also listed livestock and seeds as their main livelihood needs. Nearly half (45%) of respondents in Solukhumbu requested agriculture training – a much higher share than in any other district surveyed. Higher shares in Kathmandu (44%) and Bhaktapur (18%) than in other districts said they do not need any support at all. There was as much variation in households not needing support between districts within the same damage level category as between districts with higher or lower damage levels (except in the 'crisis hit' district category, due to the two urban districts of Kathmandu and Bhaktapur falling into this category).

Needs for cash and various types of agricultural and livestock support increased with remoteness, while those not needing any livelihood assistance, or those needing business development support, were more likely to be found in less remote areas. Similarly, respondents in urban areas were more likely to not need any support or cite business development needs than those in rural areas, whereas those in rural areas were more likely to say they needed other types of support, such as cash or agricultural inputs than those in urban areas (Table 7.6).

Table 7.6: Main livelihood needs – by district impact, district, rural/urban, remoteness (IRM-5, weighted, base=5,857)

		Cash grants	No needs	Business development support	Agriculture training	Livestock	Seeds	Business training
		%	%	%	%	%	%	%
Overall		***58***	***25***	***12***	***12***	***11***	***10***	***10***
District impact and district	**Severely hit**	**74**	**8**	**7**	**17**	**18**	**19**	**6**
	Dhading	71	12	5	20	18	20	4
	Gorkha	77	9	11	9	15	13	5
	Nuwakot	68	7	4	20	10	12	6
	Ramechhap	78	3	6	18	30	25	6
	Sindhupalchowk	74	8	11	20	20	23	6
	Crisis hit	**44**	**38**	**15**	**7**	**5**	**4**	**13**
	Bhaktapur	63	18	13	11	3	8	10
	Kathmandu	39	44	16	6	2	2	14
	Okhaldhunga	71	12	3	15	41	26	1
	Hit with heavy losses	**78**	**7**	**9**	**22**	**21**	**23**	**14**
	Solukhumbu	58	4	16	45	34	46	27
	Lamjung	89	8	6	8	14	10	6
	Hit	**78**	**11**	**7**	**7**	**20**	**8**	**3**
	Syangja	78	11	7	7	20	8	3
Rural/urban	Rural Area	67	15	8	16	16	15	10
	Urban Area	41	43	19	4	1	2	9
Remoteness	Less remote	44	40	15	5	2	3	8
	Remote	68	14	9	16	16	15	12
	More remote	72	9	8	16	32	21	5

Livelihood needs across groups: Respondents with higher educational status and higher incomes were more likely to state that they did not currently have any need for livelihood support. Those with low incomes were almost twice as likely as those with high incomes to say they needed cash support. The stated need for business support increased with income, while the need for agricultural support decreased. Observations for level of education were similar. The need for agricultural inputs and support decreased with higher education. Hill ethnic groups (Janajati) and Hill Dalits were less likely to say they did not have livelihood needs and more likely to say they needed cash or agricultural and livestock support than other castes/ethnic groups (Table 7.7).

Table 7.7: Main livelihood needs – by income, caste/ethnicity, and education (IRM-5, weighted, base=5,857)

		Cash grants	No needs	Business development support	Agriculture training	Livestock	Seeds	Business training
		%	%	%	%	%	%	%
Overall		***58***	***25***	***12***	***12***	***11***	***10***	***10***
Income	Low	78	7	5	15	21	18	5
	Medium	69	10	13	17	17	16	8
	High	47	37	14	8	5	5	13
Caste/ ethnicity	Hill castes	52	30	11	12	10	10	11
	Hill ethnic groups	67	17	8	13	17	15	5
	Hill Dalit	74	11	11	11	24	15	6
	Newar	55	27	17	9	5	5	14
Education	Illiterate	75	13	6	13	17	13	4
	Literate	63	21	9	15	16	15	4
	Primary Level	68	13	8	13	14	15	10
	Lower Secondary Level	45	28	15	15	9	9	18
	Secondary Level	66	16	22	11	8	9	9
	SLC Pass	47	39	11	7	6	7	12
	+2/Intermediate Pass	48	35	26	11	4	3	13
	Bachelor Pass	31	50	15	6	1	3	16
	Master & Above	11	68	14	0	0	0	9

Livelihood needs by housing damage and housing recovery: Those who reported earthquake damage mainly required cash grants from livelihood support—67 percent among those who said their houses were completely destroyed, 69 percent among those with major damage, 53 percent among those with minor damage, and 24 percent among those with no damage. People with completely destroyed houses were also more likely to mention livestock, seeds, and agriculture training than those with lesser housing damage. They were, however, less likely to mention business training than those who sustained lower levels of damage.

Chapter 8
Aid, needs and services

Photo: Dewan Rai (Okhaldhunga)

This chapter looks at what types of aid people received in the past year. Capturing all forms of aid and assistance helps gain a better overall picture of support provided to people in earthquake-affected areas since 2015. More detailed findings on reconstruction assistance and the housing reconstruction grants are presented in Chapters 3, 4, and 5. Livelihoods assistance is discussed in Chapter 7. This chapter looks at other types of aid and perceived fairness in aid distribution; whether all people can access support equally.

The chapter further discusses current and future needs of respondents. The IRM surveys tracked people's needs to assess whether the assistance matched stated needs, to identify the types of assistance most needed now and in the future, and to observe how needs may have changed over time.

Finally, this chapter explores another measure of recovery: access to and satisfaction with public services, such as schools, health posts, roads, and drinking water.

Key findings

Aid received

- Nearly five years after the earthquake, nine percent of respondents in earthquake-affected areas had received some form of aid within the past year – a much smaller share than in previous IRM research rounds. Households who reported some level of housing damage were more likely to have received aid than those without damages.

- Looking at types of aid received, seven percent reported getting cash; fewer people mentioned tents and tarps, food items, blankets and warm clothing – items that were more important during the relief phase.

Needs

- The most commonly cited current and future need was cash, followed by employment support.
- Households with housing damage, and those in rural areas, were more likely to mention the need for cash, employment support, and road access/better roads. They were also much less likely to say they did not need any support than those without damage and those in urban areas.
- Cash has been the top current and future need since June 2015. However, the need for cash has decreased since IRM-4 (from 69 percent in IRM-4, to 52 percent in IRM-5), likely reflecting progress in the distributions of housing grants.

Fairness of aid distribution

- A majority of respondents from IRM-2 through IRM-5 believed that everyone was able to access assistance according to their needs, regardless of their background. In IRM-5, 73 percent of respondents agreed (13% strongly agree, 60% somewhat agree) with the statement that people of every caste, religion, and ethnicity were able to access aid equally according to their needs, while 25 percent disagreed (18% somewhat disagree, 7% somewhat disagree). IRM-2 had the highest share of respondents (88%) agreeing that people can access aid equally. The highest shares of respondents who disagreed that aid distribution was fair were in IRM-3 and IRM-4, but noticeably declined in IRM-5.
- The most commonly cited group (48%) seen to receive less assistance or to face difficulties accessing assistance was the so-called 'low caste' group. Other commonly cited groups that the respondents mentioned were indigenous Janajatis, people with disabilities (26%), and the elderly (25%).

Public services

- Since April 2017 (IRM-4), access to public services – electricity, drinking water, medical facilities, school, and motorable roads – improved according to respondents. Most noticeably, the share with access to drinking water increased from 65 percent in IRM-1, to 91 percent in IRM-5.
- Respondents' satisfaction with public services also increased. They were most satisfied with electricity (96%), followed by schools (90%), and medical facilities (81%). Satisfaction with drinking water (70%) and motorable roads (72%) was comparatively lower.

8.1 Aid received

IMR-5 covered various types of assistance that people in earthquake-affected areas may have received. Chapter 3 looks assistance received during the housing recovery process. Chapter 4 specifically covers the NRA's housing grants, the Nepal government's flagship earthquake recovery program. Chapter 7 discusses livelihoods assistance. This section includes information on other forms of aid that people may have received.

Aid Coverage

Each round of the IRM surveys included questions about the types of assistance people received. Immediately following the earthquakes in June 2015, 96 percent of respondents had received some form of assistance. By 2019, nearly five years after the earthquake, just nine percent of respondents in earthquake-affected areas said they received some form of assistance in the past year – 91 percent said they had received no aid. This was the lowest share to have received aid in the IRM surveys, which is expected, given the amount of time that had passed since the earthquake (Table 8.1).

In IRM-1, aid coverage was evenly distributed across district impact categories. By the fourth round of the survey (2017), assistance was concentrated in the severely hit and crisis hit districts – likely due to the distribution of housing grants in the fourteen heavily impacted priority districts at that time. In IRM-5, people in the districts hit with heavy losses were comparatively more likely to have received aid (mostly driven by Solukhumbu) (Table 8.1).

Table 8.1: Share of people receiving any type of aid in the past year – by district impact (IRM-1 base= 2,980, IRM-2 base=4,850, IRM-3 base=4855, IRM-4 base=4,854, IRM-5 base=5,857, weighted)[1]

	Jun 2015 (IRM-1)	Feb-Mar 2016 (IRM-2)	Sep 2016 (IRM-3)	Apr 2017 (IRM-4)	Sep-Oct 2019 (IRM-5)
	%	%	%	%	%
Overall	***96***	***54***	***15***	***40***	***9***
Severely hit	**100**	**98**	**26**	**81**	**16**
Dhading	100	97	7	73	10
Gorkha	100	97	56	79	27
Nuwakot	100	99	15	84	14
Ramechhap	100	97	21	80	26
Sindhupalchowk	100	100	32	89	8
Crisis hit	**92**	**30**	**11**	**25**	**2**
Bhaktapur	100	55	0	60	8
Kathmandu	91	23	11	18	0
Okhaldhunga	100	76	34	51	9
Hit with heavy losses	**100**	**65**	**6**	**0**	**29**
Lamjung	100	47	0	0	19
Solukhumbu	100	95	16	0	47
Hit	**100**	**30**	**5**	**4**	**9**
Syangja	100	30	5	4	9

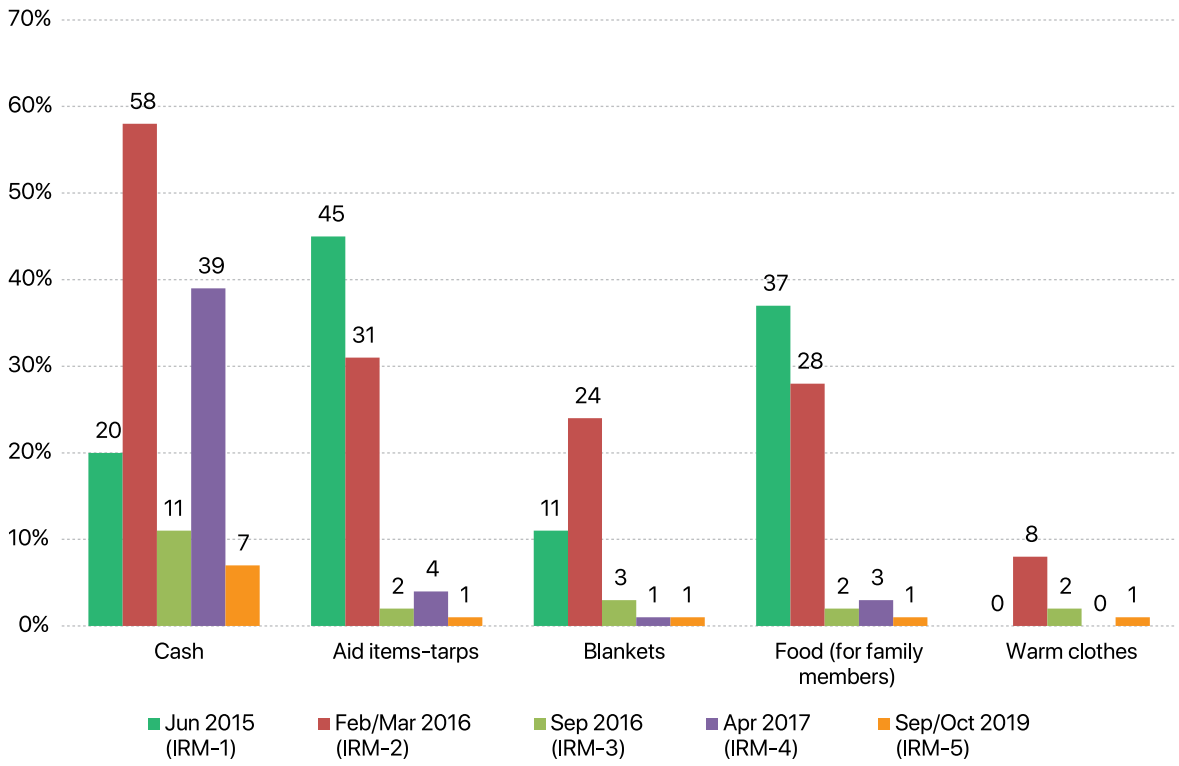
Types of aid

Over time, the type of aid items received has changed. In the initial phases, items, such as tarps, blankets, and warm clothes were given out as aid items, but by IRM-5, the share having received these items had dropped.

1 The time reference for this question varied depending on when the survey was fielded to ensure no time overlap and also to allow a reasonable time for recall. Previous surveys asked about assistance received in the last six months. For IRM-5, the question was asked as 'assistance received in the past year' (12 months).

Most respondents noted cash as the main type of aid received. Of the respondents who received aid (9%), seven percent received cash and the rest received items, like tarps, blankets, food, and warm clothes (Figure 8.1). Cash assistance from the government by IRM-5 was mainly through the disbursement of NRA housing grants, discussed in Chapters 4 and 5. Additionally, a small share of respondents also received cash allowances as part of the government's social security program. In IRM-5, when asked about aid received, seven percent said they received cash assistance (other than housing grants) from the government.

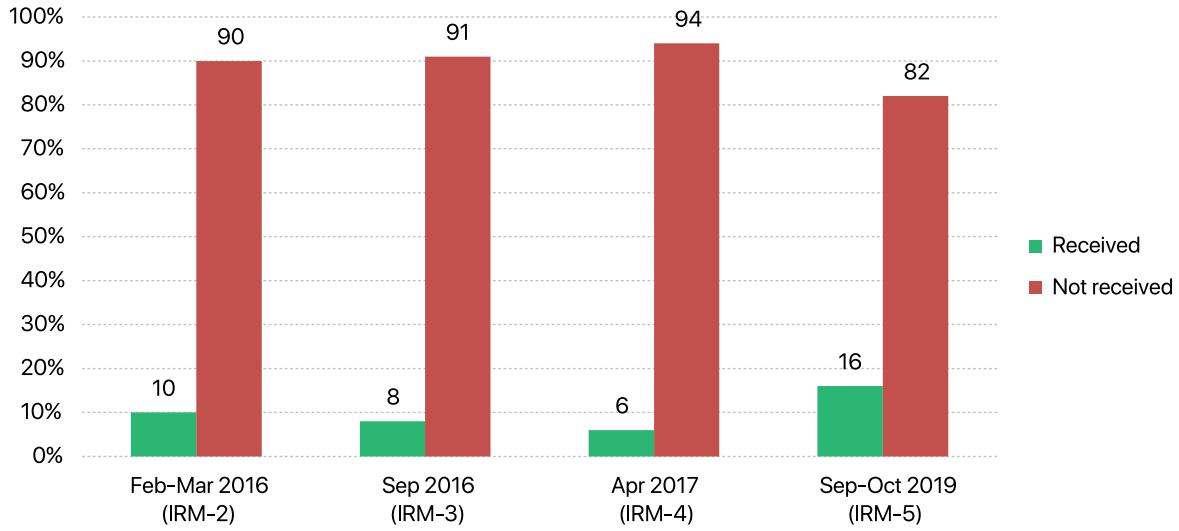
Figure 8.1: Main types of aid received (multiple answers allowed, (IRM-1 base= 2,980, IRM-2 base=4,850, IRM-3 base=4855, IRM-4 base=4,854, IRM-5 base=5,857, weighted)



Non-government cash assistance

In addition to asking about various types of aid received, all IRM surveys asked a separate question on whether people had received any cash assistance since the earthquake from non-governmental sources. This question only asked about cash assistance, the known preferred form of assistance. It was difficult to find information on non-governmental cash assistance through other data sources. At 16 percent, the share reporting cash assistance from non-governmental sources was highest in IRM-5, suggesting there was at least some additional non-governmental cash received by people between April 2017 (IRM-4) and Sep/October 2019 (IRM-5) (Figure 8.2). In IRM-5, recipients had received an average of NPR 29,614 (USD 252) from non-governmental sources after the earthquakes.

Figure 8.2: Share receiving non-government cash grants – overall (IRM-2 base=4,850, IRM-3 base=4855, IRM-4 base=4,854, IRM-5 base=5,857, weighted)

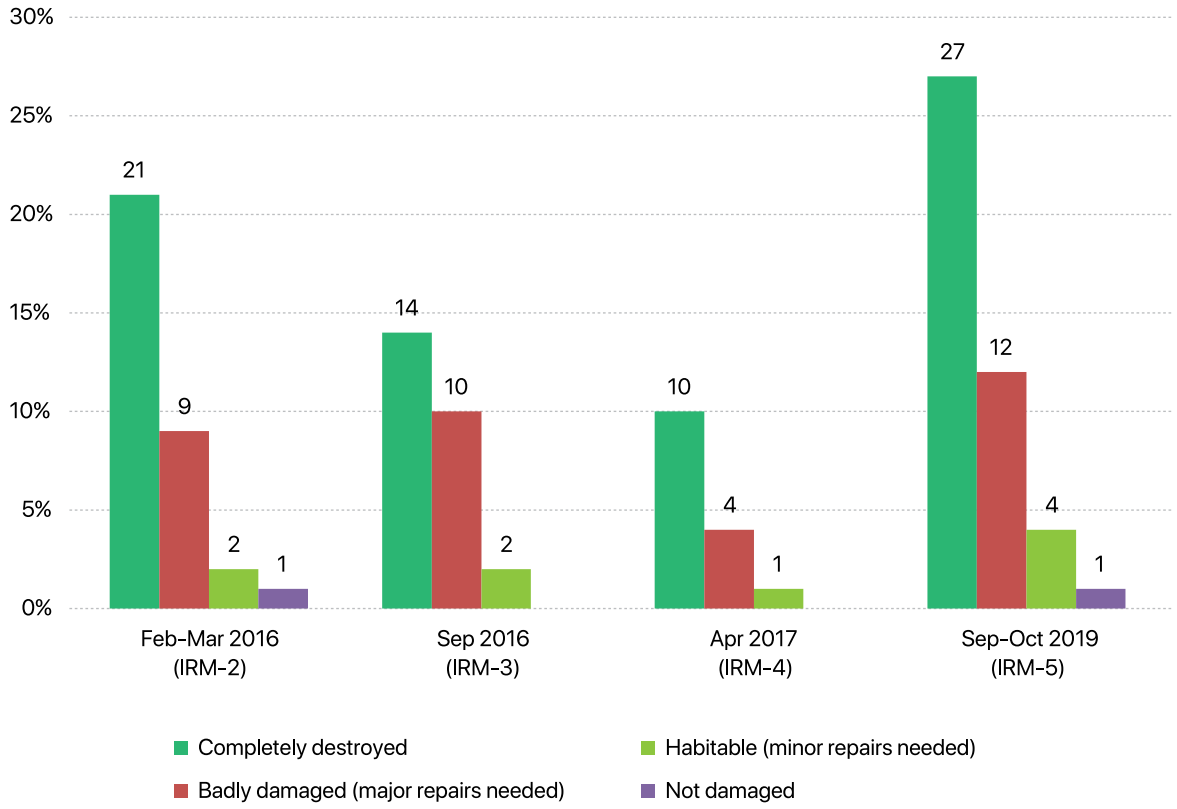


Among households that reporting receiving cash grants from non-government agencies since the earthquake, those in rural areas (24%) were significantly more likely than those in urban areas (2%) to report that their household received cash from non-government agencies – but people in rural areas were also more likely to say cash was still an urgent need for them than those in rural areas (see Chapter 8.2).

As noted in previous IRM reports, those in severely hit districts were more likely to say they received cash assistance from a non-government agency (42%) than those in other district impact categories, particularly in Nuwakot (75%) and Gorkha (61%). Respondents with lower levels of education and those with lower incomes, were comparatively more likely to have received non-government cash assistance.

Respondents who had either completely rebuilt their house or were in the process of rebuilding it were more likely to report that they had received cash from a non-government agency, compared to those who were yet begin rebuilding. Over the years, those who reported higher levels of earthquake damage were more likely to have received cash from non-government sources, demonstrating that if this assistance was targeted to earthquake-affected people, it worked as intended (Figure 8.3).

Figure 8.3: Share receiving non-government cash assistance – by reported damage levels (IRM-1 base= 2,980, IRM-2 base=4,850, IRM-3 base=4,855, IRM-4 base=4,854, IRM-5 base=5,857, weighted)



8.2 Needs

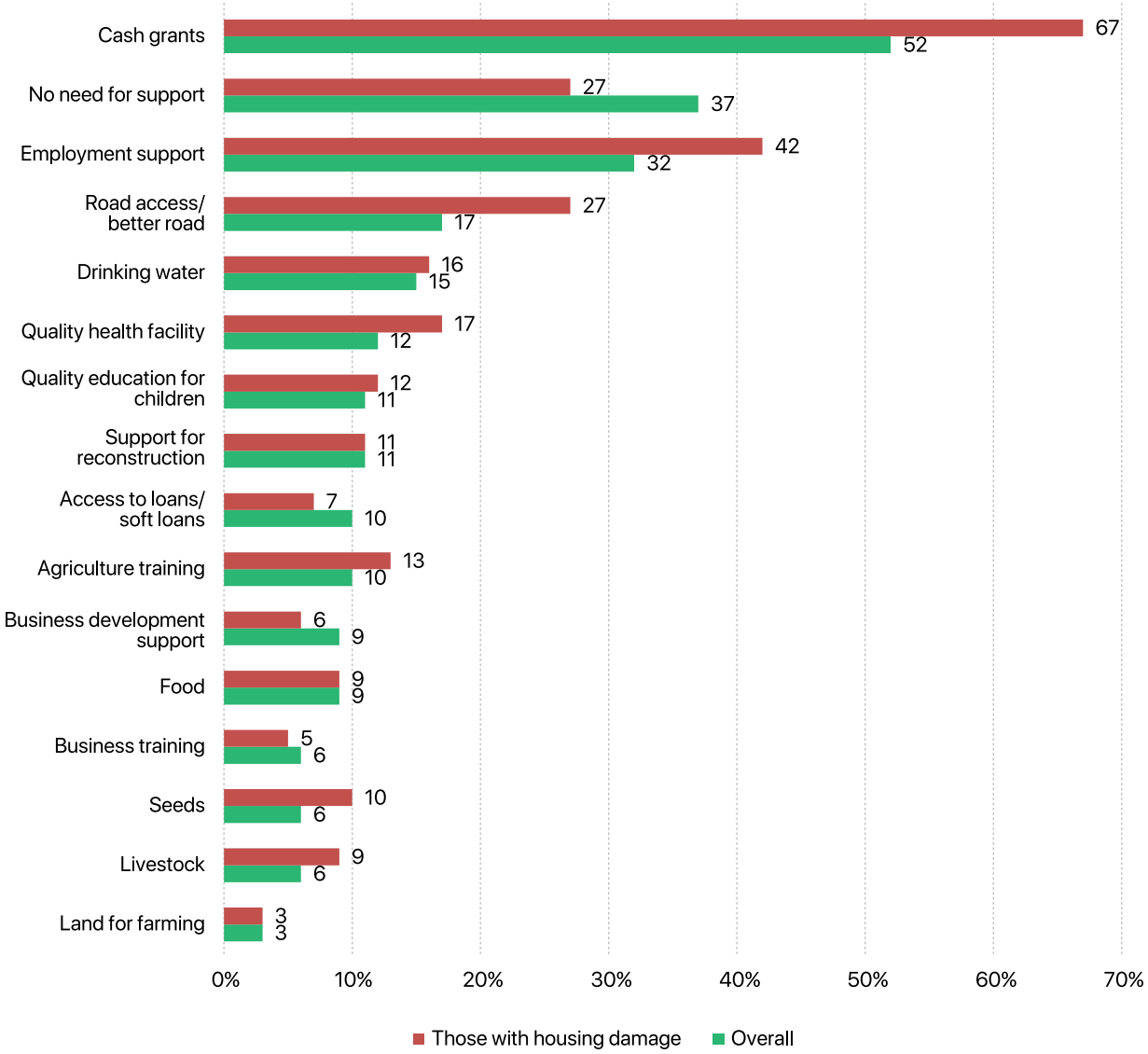
What are the current needs?

Respondents were asked to name up to three existing needs for them and their family, at the time of the survey. The most common needs cited were cash (52%) and employment support (32%). Road access/better roads (17%), drinking water (15%), quality health facilities (12%), support for reconstruction (11%), access to loans/soft loans (10%), and training on agriculture (10%) were some of their other current needs. About four in ten respondents (37%) said they did not have any need for support at the moment—perhaps because much of the recovery/rebuilding work had been completed.[2]

Responses differed slightly for those who reported housing damage. Households with housing damage were comparatively more likely to mention the need for cash (67%), employment support (42%), and road access/better roads (27%). They were also much less likely to say they did not need any support (21%).

2 Respondents were asked a series of questions related to earthquake assistance. First, they were asked what assistance they received in the past one year, then, how useful the assistance received was for the items that were given, and lastly, what were the current and future needs. For the questions on needs, respondents could name up to three items. Not having any current or future needs, or not knowing what their needs were, were recorded as answers as well.

Figure 8.4: Current needs – overall and those reporting housing damage (IRM-5, weighted, base=5,857)[3]



Across all districts, more than six in ten mentioned cash as a current need, except in Kathmandu (30%) and Solukhumbu (45%). People in rural areas (61%) were nearly twice as likely as those in urban areas (34%) to mention cash as a need, even though they were more likely to have received government or non-government cash support (Chapter 8.1). The share of respondents saying cash was a current need declined sharply with increases in income and education. Among caste/ethnic groups, Hill Dalits (72%) and Hill ethnic groups (62%) were more likely to say they needed cash compared to other Hill castes (47%) and Newars (44%).

When it came to employment support, people in Nuwakot (59%), Sindhupalchowk (43%), and Bhaktapur (40%) were the most likely to mention it. There was no notable rural/urban differences, nor differences based on remoteness of area surveyed. Medium- and high-income groups were slightly more likely than lower income groups to mention employment support as a need.

3 For the questions on needs, respondents could name up to three needs. Not having any current or future needs, or not knowing what their needs were, were recorded as answers as well.

Kathmandu (56%) residents were the most likely to say they did not need any support. Those in urban areas, less remote areas, and those with higher educational attainment and higher incomes were also comparatively more likely to say they did not need assistance.

Table 8.2: Most mentioned current needs – overall, and by district impact, district (IRM-5, weighted, base=5,857)[4]

		Cash grants	No need for support	Support with employment	Road access/ better road	Drinking water	Quality health facility
		%	%	%	%	%	%
Overall		***52***	***37***	***32***	***17***	***15***	***12***
District impact and district	**Severely hit**	**69**	**20**	**39**	**23**	**17**	**18**
	Dhading	68	26	36	24	13	14
	Gorkha	74	17	34	19	6	34
	Nuwakot	61	8	59	42	32	13
	Ramechhap	74	18	23	10	18	14
	Sindhupalchowk	70	29	40	17	17	14
	Crisis hit	**35**	**51**	**29**	**14**	**16**	**7**
	Bhaktapur	59	33	43	13	27	15
	Kathmandu	30	56	28	15	15	5
	Okhaldhunga	61	28	13	14	15	10
	Hit with heavy losses	**73**	**22**	**31**	**15**	**3**	**27**
	Solukhumbu	45	6	28	28	9	35
	Lamjung	89	31	33	8	0	22
	Hit	**74**	**20**	**22**	**10**	**6**	**16**
	Syangja	74	20	22	10	6	16
Rural/urban	Rural	61	27	33	20	14	15
	Urban	34	55	31	10	17	7
Remoteness	Less remote	38	53	31	10	18	8
	Remote	61	26	33	21	13	15
	More remote	65	17	31	29	9	20

Those who were declared eligible to receive the housing reconstruction grant (62%) were much more likely than those who were ineligible (48%) to say that they needed cash – an indication that people who were rebuilding still needed cash assistance. Similarly, those who reported at least some type of earthquake damage to their house were more likely to need cash grants, compared to people who said their house was not damaged. Results among those at different stages of housing recovery were similar—perhaps an indication that those who still needed to rebuild required cash grants for the process, and those who completed rebuilding also still felt burdened and needed cash grants.

4 For the questions on needs, respondents could name up to three needs.

Table 8.3: Most mentioned current needs – by where people are living, eligibility for housing grant, and self-assessed housing damages (IRM-5, weighted, base=5857)[5]

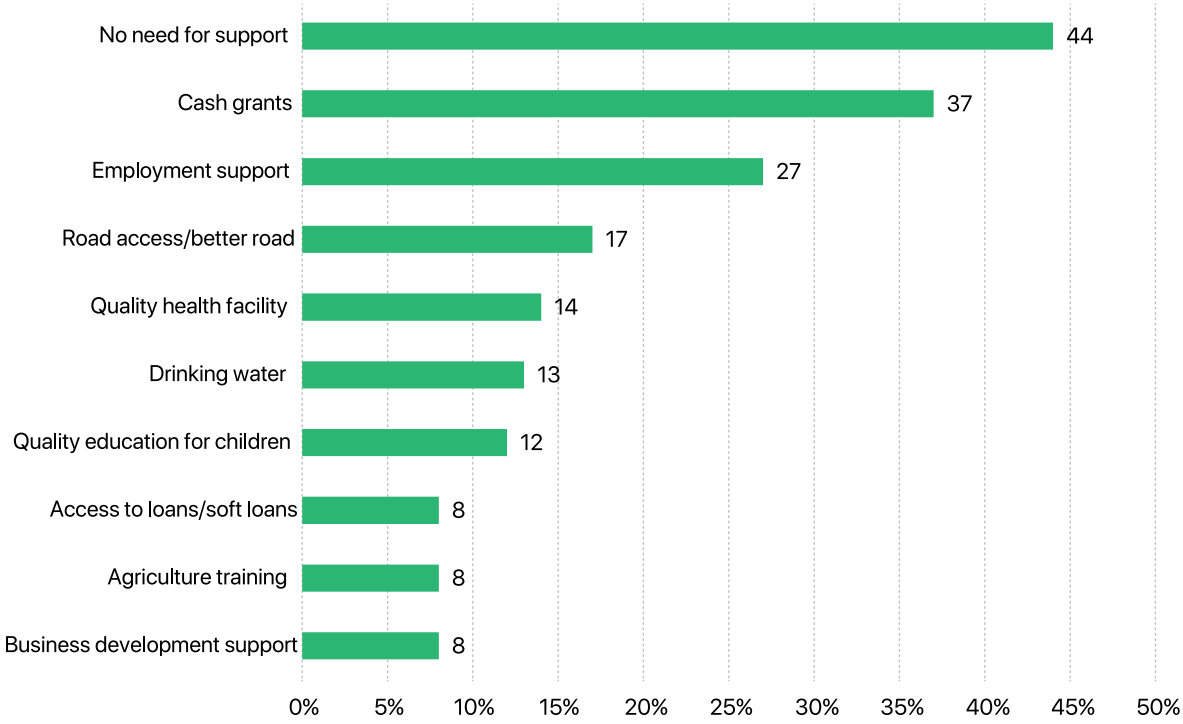
		No need for support	Cash grants	Support with employment	Road access/better road	Quality health facility	Drinking water
		%	%	%	%	%	%
Eligibility for housing reconstruction grant	Eligible for housing grant	29	62	36	18	14	15
	Not eligible for housing grant	38	48	29	16	9	14
Reported housing damages	Completely destroyed	30	61	34	18	13	15
	Badly damaged (major repairs needed)	30	58	40	13	14	12
	Habitable (minor repairs needed)	38	47	29	18	9	15
	Not damaged	60	24	26	12	12	16
Status of housing recovery	Fully rebuilt/repaired house, live in it	27	68	36	19	15	17
	Fully rebuilt/repaired house, do not live in it	49	59	25	17	12	11
	Started to repair/rebuild house and live in it	35	59	34	16	10	11
	Started to repair/rebuild house, do not live in it	22	54	33	24	13	11
	Not yet started to rebuild/ repair	39	51	26	16	9	13

What will next year's needs be?

All of the respondents were asked what needs they anticipated having in one year's time. Again, cash grants (37%) and employment support (27%) were the top two most anticipated needs – as they were for current needs. Other commonly cited future needs included road access/better roads (14%), drinking water (13%), and quality education for children (12%).

5 For the questions on needs, respondents could name up to three needs.

Figure 8.5: Top anticipated needs in one year – overall (IRM-5, weighted, base=5,857) [6]



The share of people who anticipated needing cash in one year was highest in Lamjung (72%), Gorkha (65%), Ramechhap (51%), Nuwakot (49%), and Dhading (48%). Residents in rural areas, remote areas, those with lower educational status, and those with lower incomes were more likely to state they needed cash next year. The shares of people who said they did not anticipate needing any support in one year were highest in Kathmandu (60%), followed by Sindhupalchowk (56%). The share of people saying they did not need any future support increased with income. Those in urban areas and less remote areas were also more likely than others to mention that they had no need for support in the future.

6 For the questions on future needs, respondents could name up to three needs. Not having any current or future needs, or not knowing what their needs were, were recorded as answers as well.

Table 8.4: Top anticipated needs in one year – by district impact, district, rural/urban, remoteness, and income (IRM-5, weighted, base=5,857)[7]

		No need for support	Cash grants	Support with employment	Road access/ better road	Quality health facility	Drinking water
		%	%	%	%	%	%
Overall		***44***	***37***	***27***	***17***	***14***	***13***
District impact and district	Severely hit	32	50	32	21	18	14
	Dhading	38	48	26	20	17	10
	Gorkha	21	65	29	20	30	4
	Nuwakot	15	49	52	42	14	29
	Ramechhap	23	51	22	14	17	18
	Sindhupalchowk	56	37	29	10	13	11
	Crisis hit	57	26	26	15	9	15
	Bhaktapur	44	44	44	10	17	25
	Kathmandu	60	22	24	15	8	14
	Okhaldhunga	40	42	16	13	7	10
	Hit with heavy losses	32	55	26	26	31	5
	Solukhumbu	8	25	32	54	44	13
	Lamjung	45	72	23	10	23	0
	Hit	18	45	13	10	14	6
	Syangja	18	45	13	10	14	6
Rural/urban	Rural Area	36	43	29	22	17	13
	Urban Area	61	25	23	8	8	14
Remoteness	Less remote	59	29	24	8	10	15
	Remote	34	43	29	23	16	12
	More remote	29	45	25	27	24	8
Income	Low	29	52	24	16	19	12
	Medium	38	44	31	16	14	13
	High	53	28	27	18	12	14

Those who were not eligible for the NRA housing grant were more likely to say they needed cash grants in the future and less likely to say they did not need any support. Cash grants were also a more frequently reported need for those with higher levels of housing damage than those with lesser or no damages (Table 8.5).

7 For the questions on future needs, respondents could name up to three needs.

Table 8.5: Top anticipated needs in one year – by eligibility for housing grant, status of housing recovery, and self-reported housing damages (IRM-5, weighted, base=5,857) [8]

		No need for support	Cash grants	Support with employment	Road access/ better road	Quality health facility	Drinking water
		%	%	%	%	%	%
Eligibility for housing reconstruction grant	Eligible for housing grant	38	43	30	20	15	12
	Not eligible for housing grant	45	32	24	14	13	13
Reported housing damages	Completely destroyed	40	41	29	20	14	13
	Badly damaged (major repairs needed)	38	46	25	15	19	7
	Habitable (minor repairs needed)	43	33	26	16	12	15
	Not damaged	62	25	23	11	12	16
Status of housing recovery	Fully rebuilt/repaired house, live in it	37	42	31	19	15	15
	Fully rebuilt/repaired house, do not live in it	50	36	22	22	12	5
	Started to repair/rebuild house and live in it	41	35	26	18	15	11
	Started to repair/rebuild house, do not live in it	41	37	29	25	16	11
	Not yet started to rebuild/repair	47	39	22	15	13	10

Changes in needs

Since IRM started in June 2015, cash has been the top current need cited by respondents. In IRM-1, nearly four in ten (38%) mentioned cash as their most important current need. The share who mentioned cash as their top current need has grown steadily since then, with half of respondents (49%) mentioning it in IRM-2, six in ten (59%) in IRM-3, and seven in ten (69%) in IRM-4. The need for cash decreased after IRM-4 (52% in IRM-5), reflecting progress in the distribution of housing grants. The need for emergency relief, such as food, also decreased over time, as did the need for corrugated iron (CGI) sheets, which were mentioned nearly as often as cash in IRM-1. Items needed to reconstruct houses remained at around 30 percent between IRM-2 and IRM-4. In IRM-5, 11 percent said they needed support for reconstruction but only 6 percent anticipated needing reconstruction support in one year's time.

When asked about anticipated needs for the future, people again prioritized cash in all survey rounds. Forty percent anticipated cash as a future need in IRM-1, 26 percent in IRM-2, and after that, it grew to 55 percent in IRM-3, and 64 percent in IRM-4. In IRM-5, it was lower, at 37 percent, again possibly reflecting the fact that more people had received housing grants and had rebuilt by IRM-5.

8 For the questions on future needs, respondents could name up to three needs.

In IRM-5, support beyond what is needed for housing reconstruction and basic necessities were mentioned for both current and future needs—a change from previous rounds. People were now mentioning employment support and better infrastructure and services, such as roads, drinking water, and education.

Table 8.6: Changes in current and anticipated needs (IRM-1 base= 2,980, IRM-2 base=4,850, IRM-3 base=4855, IRM-4 base=4,854, IRM-5 base=5,857, weighted)[9]

	Jun 2015 (IRM-1)	Dec 2015 Projected (IRM-1)	Feb-Mar 2016 (IRM-2)	Sep 2016 Projected (IRM-2)	Sep 2016 (IRM-3)	Mar 2017 Projected (IRM-3)	Apr 2017 (IRM-4)	Oct 2017 Projected (IRM-4)	Sep-Oct 2019 (IRM-5)	Sep-Oct 2020 Projected (IRM-5)
Cash	38	40	49	26	59	55	69	64	67	37
Items to reconstruct house	-	-	33	11	30	20	30	18	-	-
Clean drinking water	6	5	3	3	2	2	9	8	15	13
Corrugated iron sheets	37	21	5	3	11	5	6	4	-	-
Rice, wheat, maize	27	24	17	8	10	10	7	6	-	-
Farm implements	4	6	3	1	2	2	6	6	-	-
Clean water for household purposes	2	3	2	1	2	2	6	4	-	-
Support with employment	-	-	-	-	-	-	-	-	42	27
Road access/ better road	-	-	-	-	-	-	-	-	17	17
Quality health facility	-	-	-	-	-	-	-	-	12	14

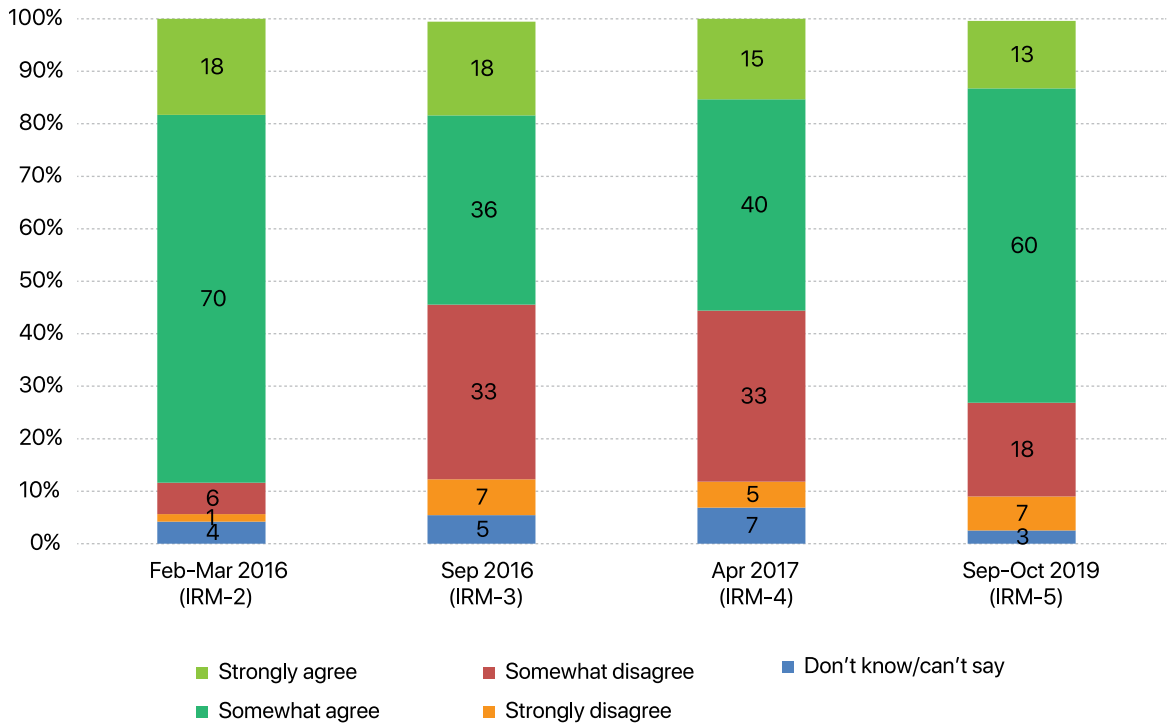
8.3 Fairness of aid distribution

Equal access to assistance

Since IRM-2, all respondents were asked whether or not they believed that people of every caste, religion, and ethnicity were able to access assistance equally, according to their needs. A majority of respondents from IRM-2 through IRM-5 believed that everyone was able to access assistance according to their needs, regardless of their background. In IRM-5, 73 percent of respondents agreed (13% strongly agree, 60% somewhat agree) with this, and 25 percent disagreed (18% somewhat disagree, 7% somewhat disagree). IRM-2 had the highest share of respondents agreeing to the statement (88%) and IRM-3 had the the lowest (54%).

9 For the questions on needs, respondents could name up to three needs. Empty fields mean N/A (the response option was not asked about given changing priorities and needs).

Figure 8.6: Opinions on whether all can get aid equally according to their needs (IRM-2 base=4,850, IRM-3 base=4855, IRM-4 base=4,854, IRM-5 base=5,857, weighted)

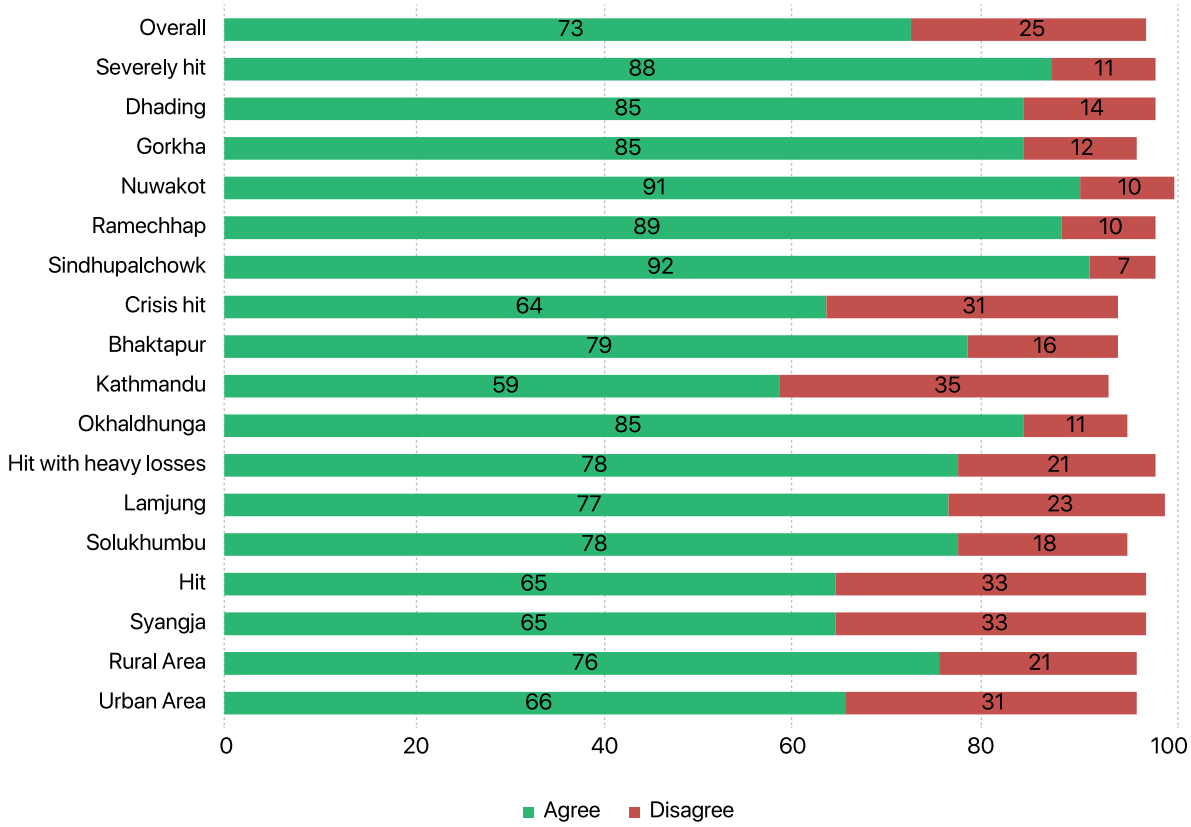


The combined share of respondents who either strongly agreed or somewhat agreed that assistance was equally accessible to all people without discrimination was the highest in Sindhupalchowk (92%), followed by Nuwakot (91), and Ramechhap (89%).

On the other hand, the combined share of respondents who either strongly disagreed or somewhat disagreed with the statement was relatively higher in Kathmandu (35%) and Syangja (33%).

Residents of urban areas (31%) were more likely to disagree that all people were equally able to access assistance compared to residents of rural areas (21%).

Figure 8.7: Opinions on whether all can get aid equally according to their needs – by district impact, district and rural/urban (IRM-5, weighted, base=5,857)[10]



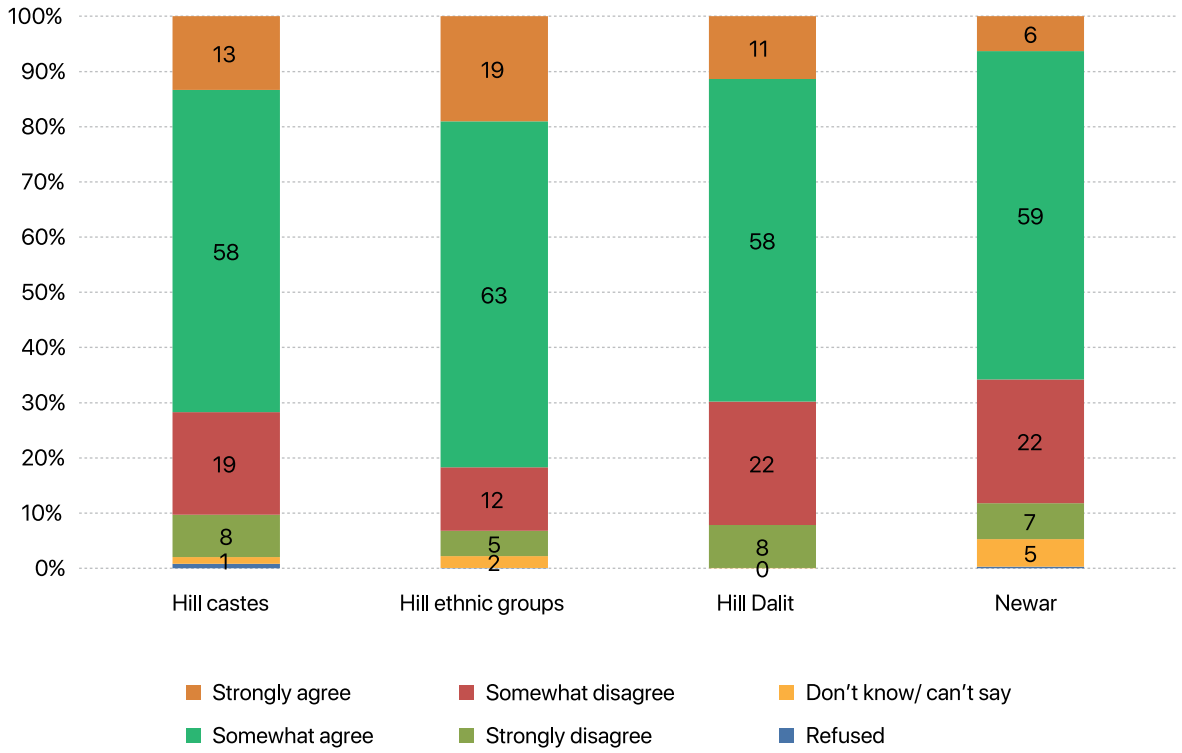
Overall, the majority of people across various castes/ethnic groups thought that people were able to access assistance equally according to their needs, regardless of their backgrounds, but those belonging to Hill ethnic communities were most likely to hold this view. The Hill ethnic community was also more likely to strongly agree (19%) compared to Hill Dalits (11%) and Newars (6%).

Although more than seven in ten Hindus and Buddhists agreed that all people were able to get assistance in a fair manner, Buddhists were more likely to hold this view strongly (22% Buddhists vs. 11% Hindus).[11]

10 Remaining shares were unsure or could not/refused to answer.

11 Sample sizes for other religions were too small for separate analysis.

Figure 8.8: Opinions on whether all can get aid equally according to their needs – by caste/ethnicity (IRM-5, weighted, base=5,857)[12]



Which groups received less assistance and faced difficulties accessing assistance?

Respondents who said they either somewhat disagreed or strongly disagreed that people of every caste, religion, and ethnicity were equally able to access assistance according to their needs were asked to state the group of people they thought received less assistance or tended to face difficulties while receiving assistance.

In all rounds, the most commonly cited group perceived to receive less assistance or face the most difficulties receiving assistance were so-called low castes (47% in IRM-5). Other commonly cited groups mentioned by respondents were *Janajatis* (indigenous groups), people with disabilities (26%), and the elderly (25%).

12 Sample sizes for Madhesi, Terai Madhesi Ethnic groups, and Muslims were too small for analysis.

Figure 8.9: Groups that people think tend to get less aid among those who say not everyone is able to get aid equally (IRM-2 base=4,850, IRM-3 base=4,855, IRM-4 base=4,854, IRM-5 base=5,857; weighted)

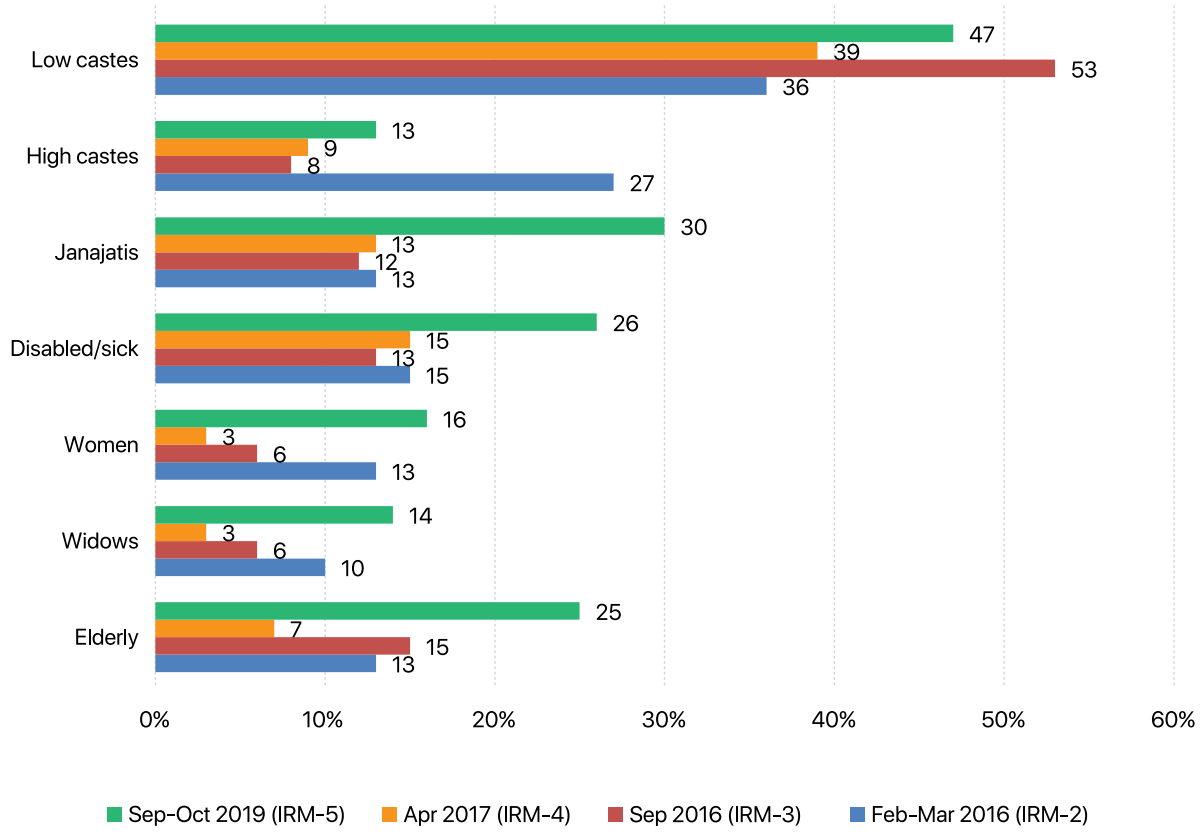
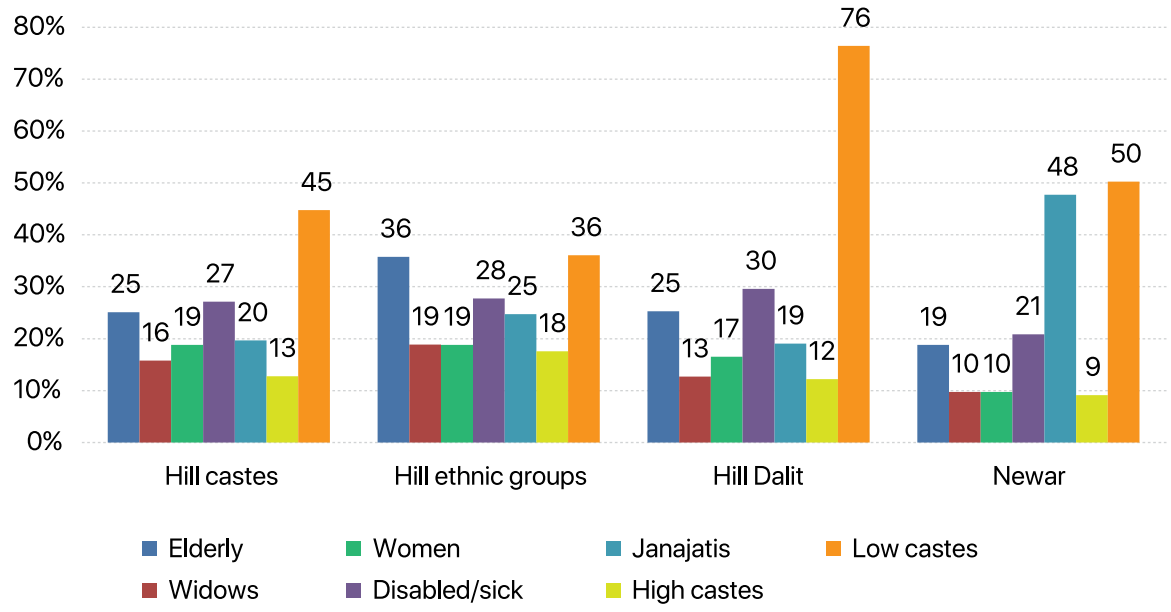


Figure 8.10: Groups that people think tend to get less aid among those who say not everyone is able to get aid equally – by caste (IRM-5, base=1,430, weighted) [13]

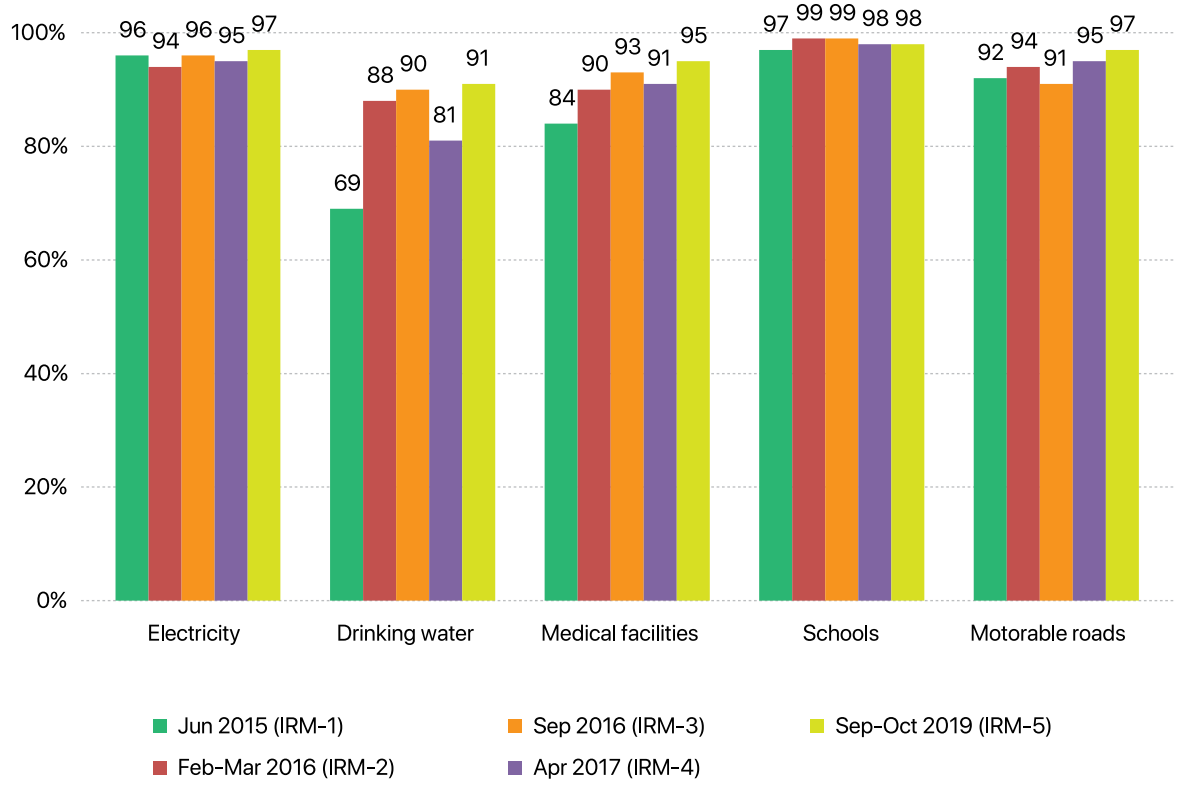


13 Sample sizes for Madhesi, Terai Madhesi Ethnic Groups and Muslims were too small for analysis.

8.4 Public services

The IRM surveys tracked access to key services as well as the earthquake's impacts on these services. Throughout all rounds, most respondents said they have had access to electricity, drinking water, medical facilities, school, and motorable roads. Drinking water supply was available for 69 percent of respondents in IRM-1, compared to over 80 percent in subsequent rounds. In IRM-5, 91 percent reported having access to drinking water in their home – a higher share than in previous rounds. In IRM-5, access to drinking water was above 83 percent in all districts, which signifies an improvement from previous rounds. The share of respondents having access to the other services remained mostly the same over time.

Figure 8.11: Share saying they have access to the services provided by rural municipalities/municipalities (IRM-1 base= 2,980, IRM-2 base=4,850, IRM-3 base=4,855, IRM-4 base=4,854, IRM-5 base=5,857, weighted)



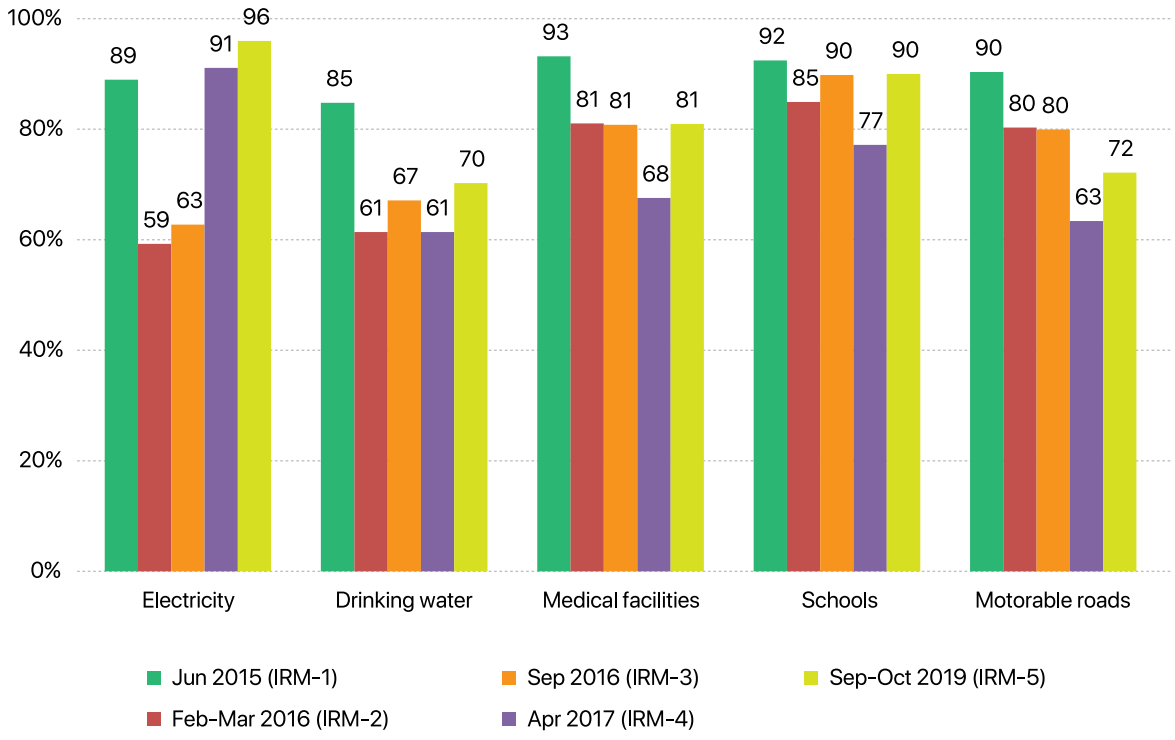
Satisfaction with Public Services

Respondents who reported having access to different types of public services/amenities were further asked about their satisfaction with each of these services.

Respondents' satisfaction with different services decreased noticeably after IRM-1 (IRM-2 to IRM-4), but increased since the last survey round in April 2017 (IRM-4) (Figure 8.12). In IRM-5, respondents expressed the highest satisfaction level with regards to electricity (96%), followed by school (90%), and medical facilities (81%). They were less satisfied with drinking water facilities (18%)

and motorable roads (15%). With the exception of electricity, respondents' satisfaction with other services was lower in IRM-5 than in IRM-1, perhaps due to higher expectations than in the weeks immediately following the earthquake.

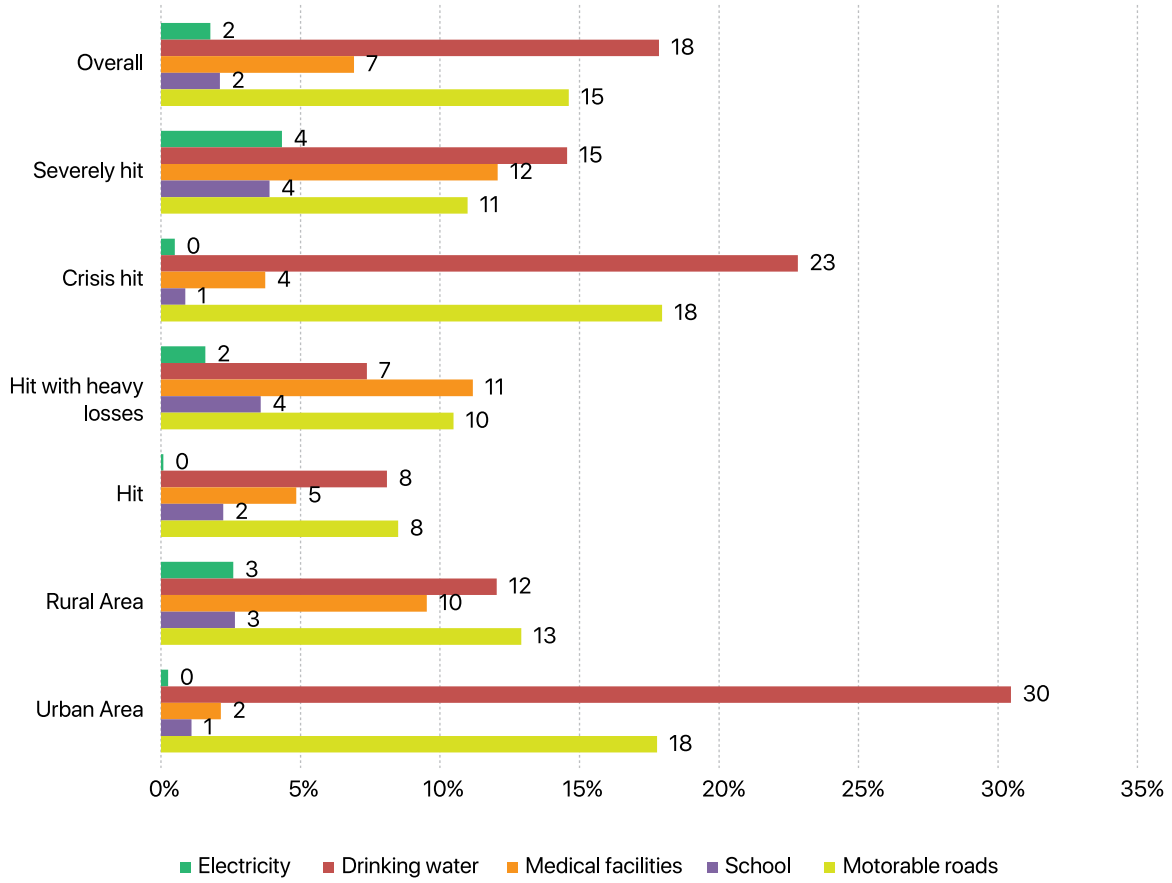
Figure 8.12: Satisfaction with public services (IRM-1 base= 2,980, IRM-2 base=4,850, IRM-3 base=4,855, IRM-4 base=4,854, IRM-5 base=5,857, weighted)



Where were people more dissatisfied with public services?

Rates of dissatisfaction greatly differed between district impact categories and between rural and urban areas. Respondents from crisis hit districts (23%) and urban areas (30%) were more likely to express dissatisfaction with drinking water than those in other district impact categories, or those in rural areas (Figure 8.13). Residents of rural areas (10%) were more likely than those in urban areas (2%) to say they were dissatisfied with medical facilities. Dissatisfaction with motorable roads (18%) was the highest in the crisis-hit districts among the district impact categories, despite the inclusion of the well-connected districts of Kathmandu and Bhaktapur in this category.

Figure 8.13: Dissatisfaction with public services – by district impact and rural/urban (IRM-5, weighted, base=5,857)

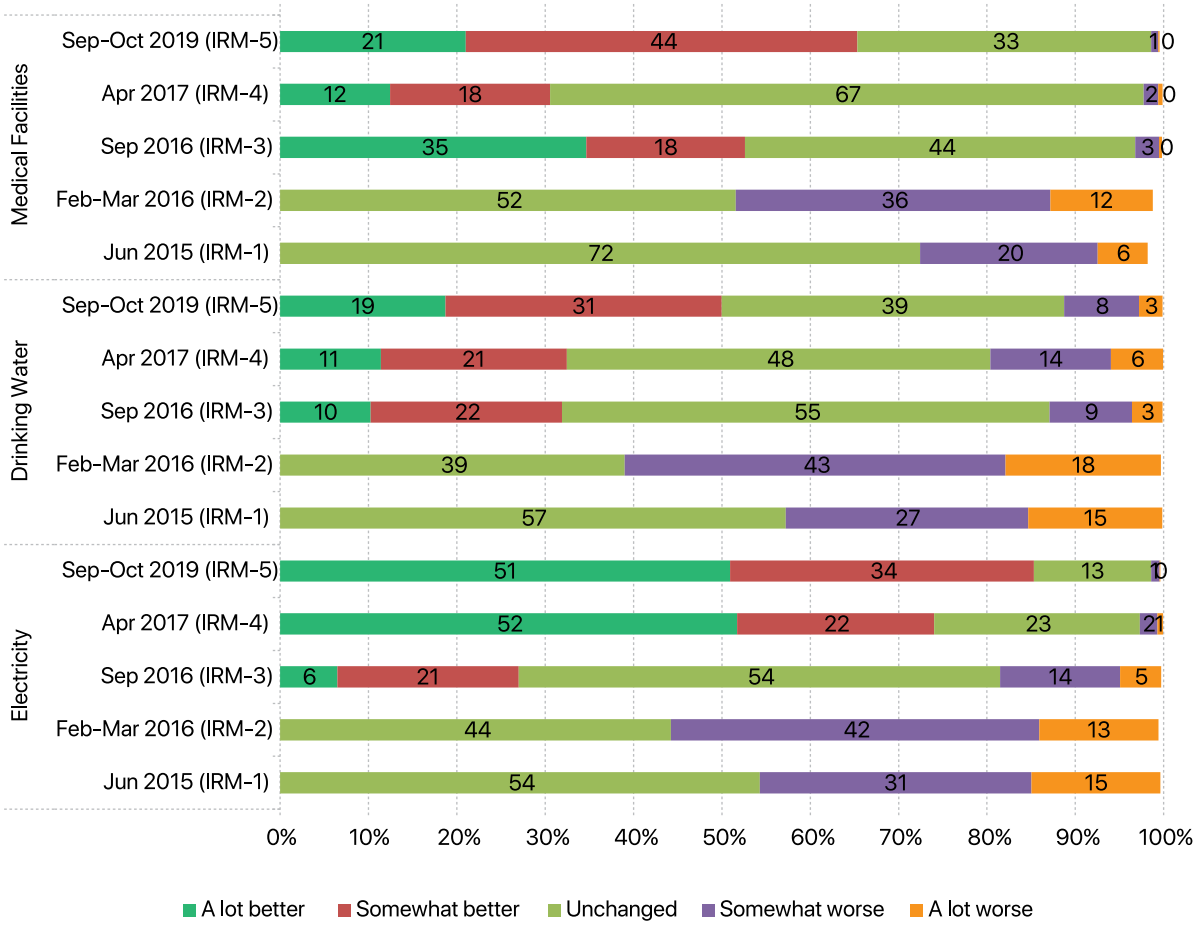


Changes to public services since the earthquake

Respondents who reported that they had access to public services were further asked if these services had improved or gotten worse since the earthquake. The provision of electricity was most frequently cited as having gotten better. Between IRM-3 and IRM-5, the shares who said electricity services had improved steadily increased (Figure 8.14). Up until early 2016, no one reported improvements to drinking water.

Drinking water supply and medical facilities stayed the same in 2015, but worsened in 2016, the year right after the earthquake. Both facilities were reported to have improved in subsequent years. In 2019, 65 percent said medical facilities had gotten better (21% a lot better, 44% somewhat better) and 50 percent said that drinking water facilities had gotten better (19% a lot better, 31% somewhat better).

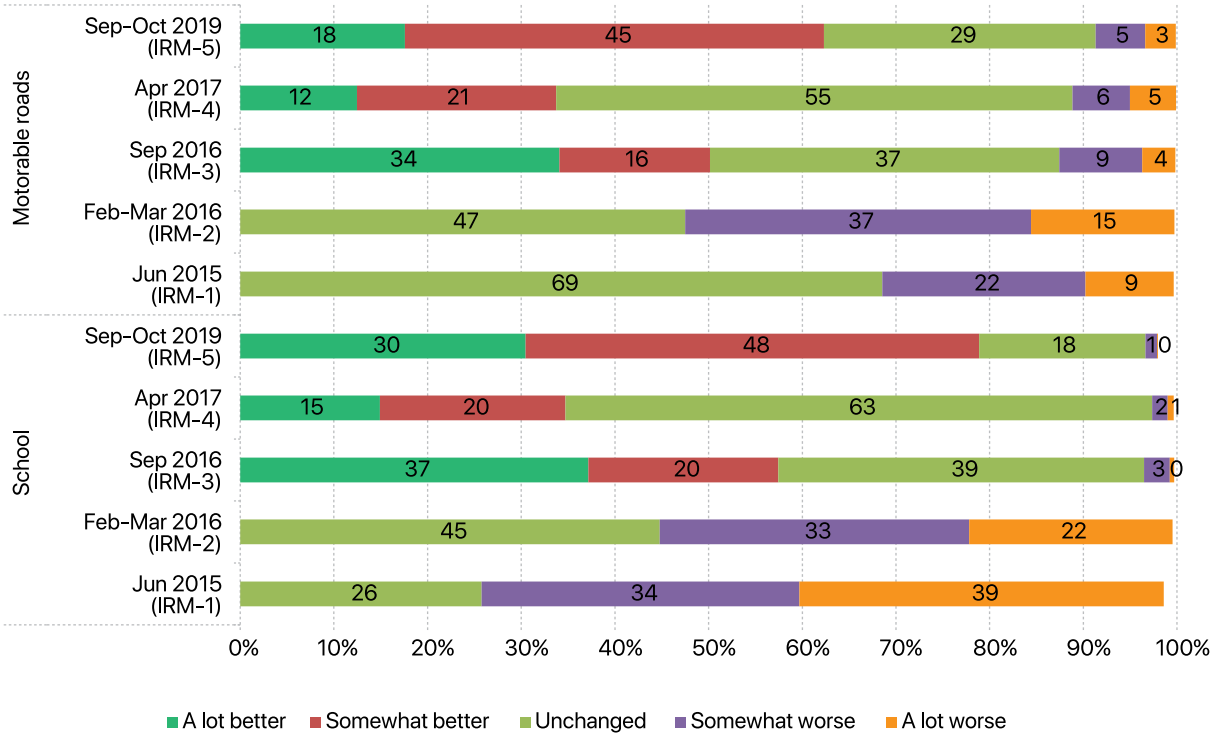
Figure 8.14: Changes to public services: Electricity, drinking water and medical facilities (IRM-1 base= 2,980, IRM-2 base=4,850, IRM-3 base=4855, IRM-4 base=4,854, IRM-5 base=5,857, weighted)



Between IRM-4 (April 2017) and IRM-5 (September-October 2019), the shares of respondents who said that school services and access to motorable roads had gotten better increased, while the shares saying they had gotten worse decreased (Figure 8.15).

Most respondents reported that school facilities had worsened when the first and second survey rounds were conducted, in June 2015 and February 2016 respectively. In the third survey round (September 2016), 57 percent reported improvements to school facilities, while 39 percent said schools had stayed the same. By the fourth round (April 2017), 63 percent reported that school facilities had stayed the same, while 35 percent said they had improved since the earthquake. In IRM-5, the majority of respondents (78%) said that school services had either gotten a lot better or somewhat better. The shares of respondents who reported worsening of school services from IRM-3 to IRM-5 were very small (Figure 8.15).

Figure 8.15: Changes to the public services: Schools and motorable roads (IRM-1 base= 2,980, IRM-2 base=4,850, IRM-3 base=4855, IRM-4 base=4,854, IRM-5 base=5,857, weighted)



Chapter 9
Security, Social Relations, and Illness

Photo: Dewan Rai (Okhalhdunga)

This chapter looks at secondary earthquake impacts such as people's safety, incidents of violence, social relations and levels of trust in institutions, and illness and psychological wellbeing. First, it highlights people's perceptions of their own safety and their experiences or observations of violent incidents. Secondly, it looks at people's trust in various institutions and leaders and whether levels of trust have changed over time. Finally, the chapter discusses occurrences of illness, the types of illnesses commonly reported, and whether people are still experiencing psychological effects nearly five years after the earthquake.

Key findings

Security and protection

- The majority of respondents (58%) said that they felt very safe, while 38 percent said they felt somewhat safe. Only a small minority of three percent said they felt somewhat unsafe, and one percent said they felt very unsafe. Respondents in rural areas were more likely to state that they feel safe in their community.

- Eight percent reported violent incidents in their community in the past year – a small share, but a noticeable increase compared to previous rounds. Respondents residing in urban areas, particularly in the district of Kathmandu, were more likely to say that a violent incident had occurred in the community.

Trust and social cohesion

- According to respondents, the most trusted institutions were the media (92%), Community Based Organizations (CBOs) (85%), and the Nepal Army (83%). The most trusted individuals among political and elected leaders were ward chairpersons (70%).

- Almost three-fourths of respondents (72%) said they trusted the people they know, one-third (32%) reported trusting people from a different area, a little over half (51%) said they trust people from a different caste, and slightly less than half (48%) said they trust people belonging to a different religion. Residents of rural areas were generally more likely to trust people than those residing in urban areas.

- Since IRM-4 (April 2017), similar shares of respondents reported that they would be very likely or likely to conserve food or water in the community in case of an emergency when requested by public officials (87% in IRM-5). The share of respondents who were either very unlikely or unlikely to cooperate to save food and water in an emergency was relatively higher in crisis-hit and in urban areas, especially in Kathmandu.

- Compared to previous survey rounds, IRM-3 (September 2016) and IRM-4 (April 2017), a smaller number of people said that their relations with neighbors had improved or become better since the earthquake. Most respondents (85%) reported that their relations with neighbors had remained the same since the earthquake. Residents of rural areas were more likely than those in urban areas to report that relations with neighbors had improved.

Illness and psychological effects

- Nine percent of respondents reported that their family members had fallen sick during the 2019 monsoon due to problems with their shelter – although most of those reporting illness were now living in their new house. The most common illness was fever or flu.

- In IRM-5 (Sept-Oct 2019), six percent of respondents reported that someone in their family was still suffering from psychological effects of the earthquake – a lower share than in previous years. Respondents who said that their houses were damaged by the earthquake were more likely than those with lesser or no damage to say they had a family member who still suffered psychological effects from the earthquake. Extreme fear was the most common psychological effect, followed by nervousness.

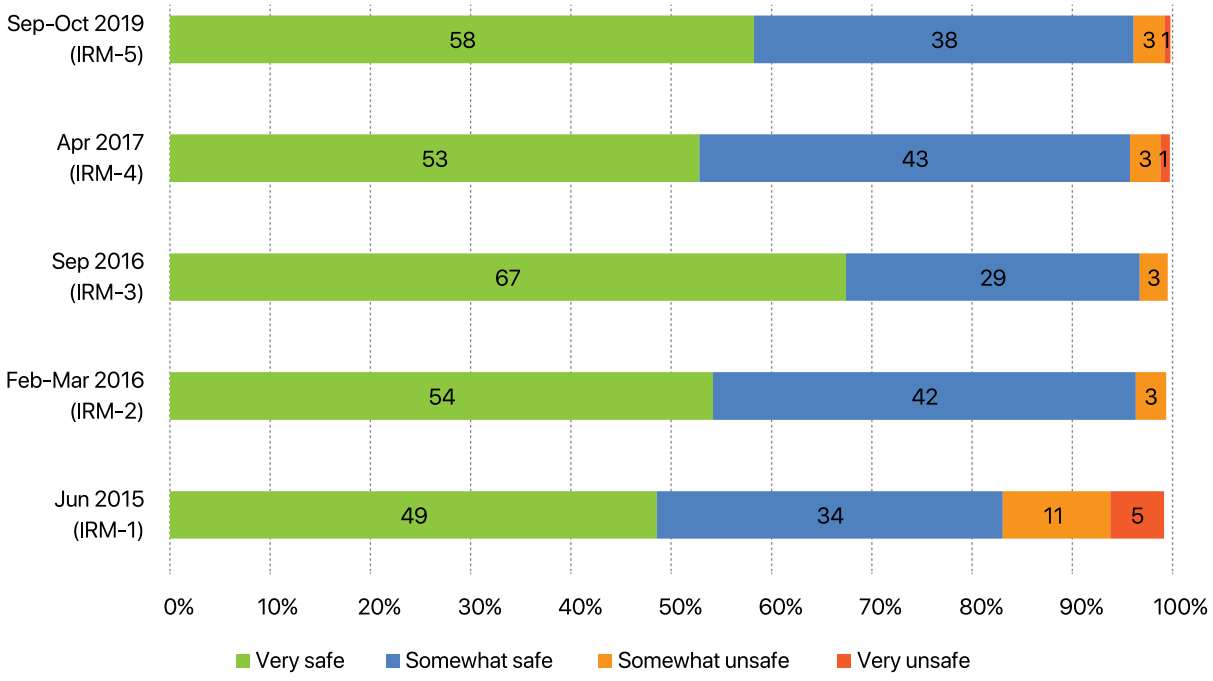
- While those residing in urban areas were more likely to say their family member had fallen ill due to problems with housing/shelter conditions, those residing in rural areas were more inclined to say that someone in their family was suffering psychological effects from the earthquake.

9.1 Security and protection

Perceptions of safety and security

All respondents were asked to state how safe and secure they felt in their community. In all five survey rounds, respondents largely felt safe in their community (Figure 9.1). They felt the least safe in IRM-1 (June 2015), likely due to chaos in the immediate aftermath of the earthquake and the fact that most people were staying in temporary shelters at that time. By IRM-3 (September 2016), a larger share than during any of the other round (67%) said they felt very safe. The shares who said they felt unsafe were similar between IRM-2 (Feb-Mar 2016) and IRM-5 (Sept-Oct 2019), at 3 to 4 percent. In IRM-5, 58 percent said they felt very safe, 38 percent said they felt somewhat safe, only three percent said they felt somewhat unsafe, and one percent felt very unsafe.

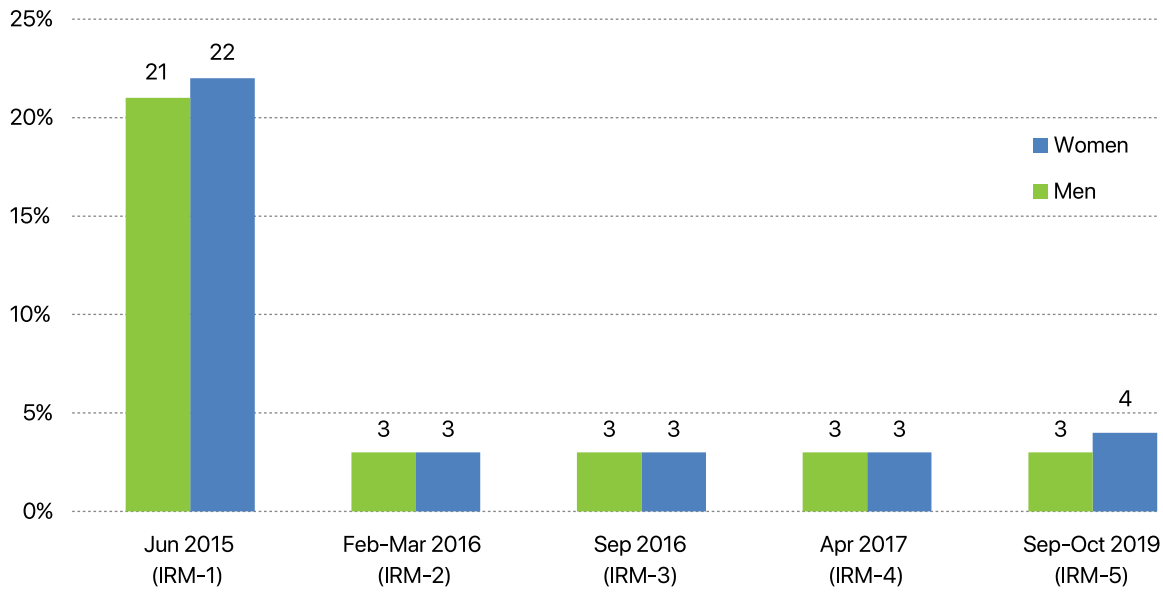
Figure 9.1: Perception of security (IRM-1 base= 2,980, IRM-2 base=4,850, IRM-3 base=4855, IRM-4 base=4,854, IRM-5 base=5,857, weighted)



There were no substantive differences in the perception of safety between men and women. The shares who said they felt unsafe were similar between both genders (Figure 9.2).

Those over 65 years old were slightly more likely to say they felt safe compared to younger respondents.

Figure 9.2: Share feeling unsafe (either very or somewhat unsafe) in their community – by gender (IRM-1 base= 2,980, IRM-2 base=4,850, IRM-3 base=4855, IRM-4 base=4,854, IRM-5 base=5,857, weighted)

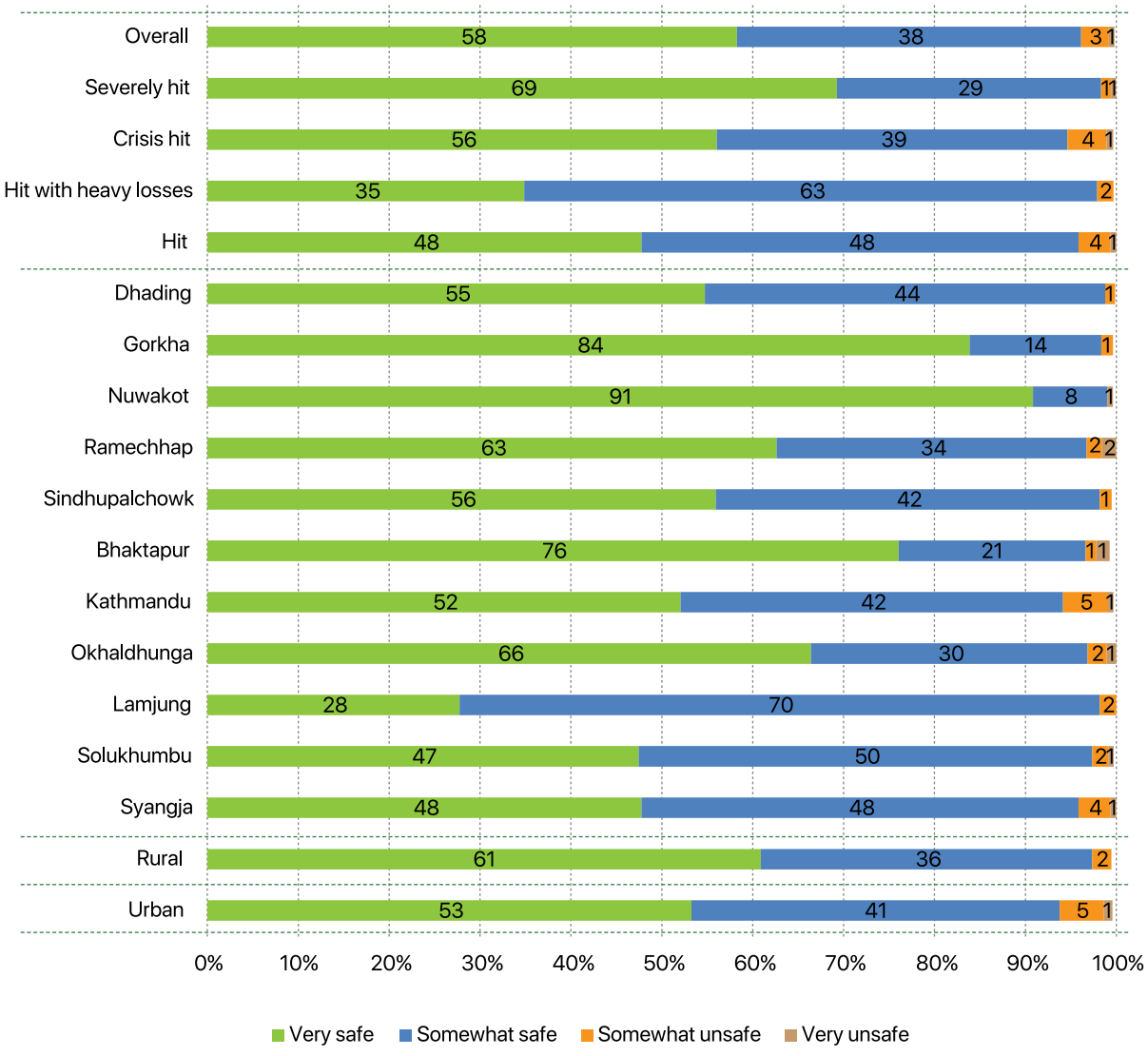


The overall feeling of safety and security was slightly higher in rural areas than in urban areas. Moreover, the share of the respondents who said that they felt 'very safe' was slightly higher in rural areas (61%) than in urban areas (53%) (Figure 9.3).

While respondents in districts severely hit by the earthquake (69%) and crisis-hit districts (56%) were more likely to report that they felt very safe in their community, respondents in districts hit with heavy losses were more likely to report that they felt somewhat safe (63%).

Larger shares of respondents from Nuwakot (91%), Gorkha (84%), and Bhaktapur (76%) felt very safe in their community. On the other hand, a major proportion of respondents in Lamjung (70%) and Solukhumbu (50%) reported that they felt somewhat safe in their community. An equal proportion of respondents (48% each) in Syangja reported that they felt very safe or somewhat safe while living in their locality.

Figure 9.3: Perceptions of security – by district impact, district and rural/urban (IRM-5, weighted, base=5857)



Violent incidents in the community

In all survey rounds, respondents were asked if there had been any violent incident(s) in their community and about the number of incidents that occurred over the past year. The shares who said there had been violent incident(s) was low across survey rounds. Between IRM-1 (June 2015) and IRM-4 (April 2017), it was at three percent or lower. In IRM-5 (Sept-Oct 2019), it was highest at 8 percent (Table 9.1).[1] Respondents residing in urban areas (12%) were twice as likely as those in rural areas (6%) to report that there was a violent incident in their community.

Table 9.1: Share of people saying there was a violent incident in the community in the past year - by district impact, district, IRM-1 to IRM-5 (IRM-1 base= 2,980, IRM-2 base=4,850, IRM-3 base=4855, IRM-4 base=4,854, IRM-5 base=5,857, weighted)

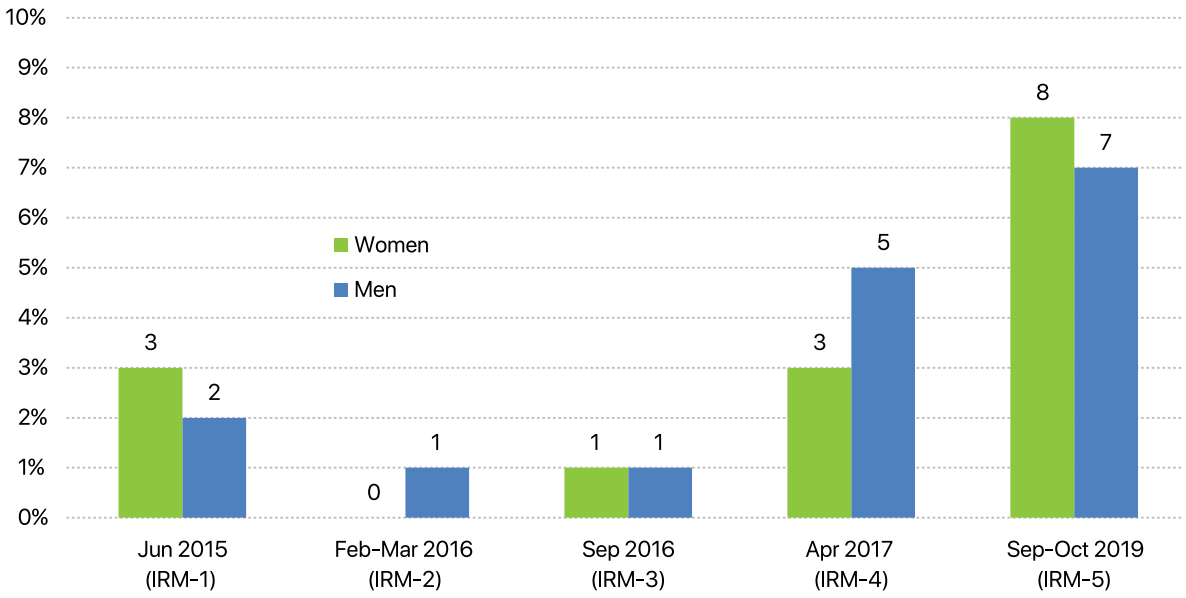
	Jun 2015 (IRM-1)	Feb-Mar 2016 (IRM-2)	Sep 2016 (IRM-3)	Apr 2017 (IRM-4)	Sep-Oct 2019 (IRM-5)
	%	%	%	%	%
Overall	***3***	***1***	***1***	***1***	***8***
Severely hit	**2**	**0**	**2**	**1**	**2**
Dhading	5	1	0	1	2
Gorkha	1	0	3	1	0
Nuwakot	2	1	3	2	4
Ramechhap	0	1	1	1	2
Sindhupalchowk	1	0	3	0	4
Crisis hit	**5**	**1**	**1**	**2**	**12**
Bhaktapur	5	1	0	1	4
Kathmandu	19	0	0	8	14
Okhaldhunga	2	2	2	2	5
Hit with heavy losses	**3**	**1**	**0**	**0**	**1**
Lamjung	3	0	0	0	1
Solukhumbu	3	3	0	0	2
Hit	**3**	**2**	**1**	**1**	**5**
Syangja	3	2	1	1	5

People in the 'hit with heavy losses' (1%) and 'severely hit' (2%) districts were the least likely to report violent incidents in their community in the past year. Respondents in 'crisis hit' districts were comparatively much more likely (12%) to report violent incidents in their community. This is due to the inclusion of the urban district of Kathmandu in the 'crisis hit' category, and the higher shares of people in urban areas reporting violent incidents. Compared to other districts, Kathmandu has the highest share of respondents (14%) who reported that there had been violent incidents in their locale (Table 9.1).

1 Booster samples in urban areas were added in IRM-5 to better capture urban recovery trends and rural-urban differences (see Chapter 1 and Annexes). The larger urban sample may, in part, account for higher incidents of violence in IRM-5, given that people in urban areas were much more likely to say there had been violence. However, even in rural areas, six percent said there was violence, in IRM-5, revealing increases across urban and rural areas compared to previous rounds.

In each survey round, the shares of women reporting a violent incident were similar to the share of men. In IRM-1 (June 2015) and IRM-5 (Sept-Oct 2019), women were slightly more likely to report violent incidents (by one percentage point), whereas in other rounds, they were either as likely as men or less likely than men to report violence.

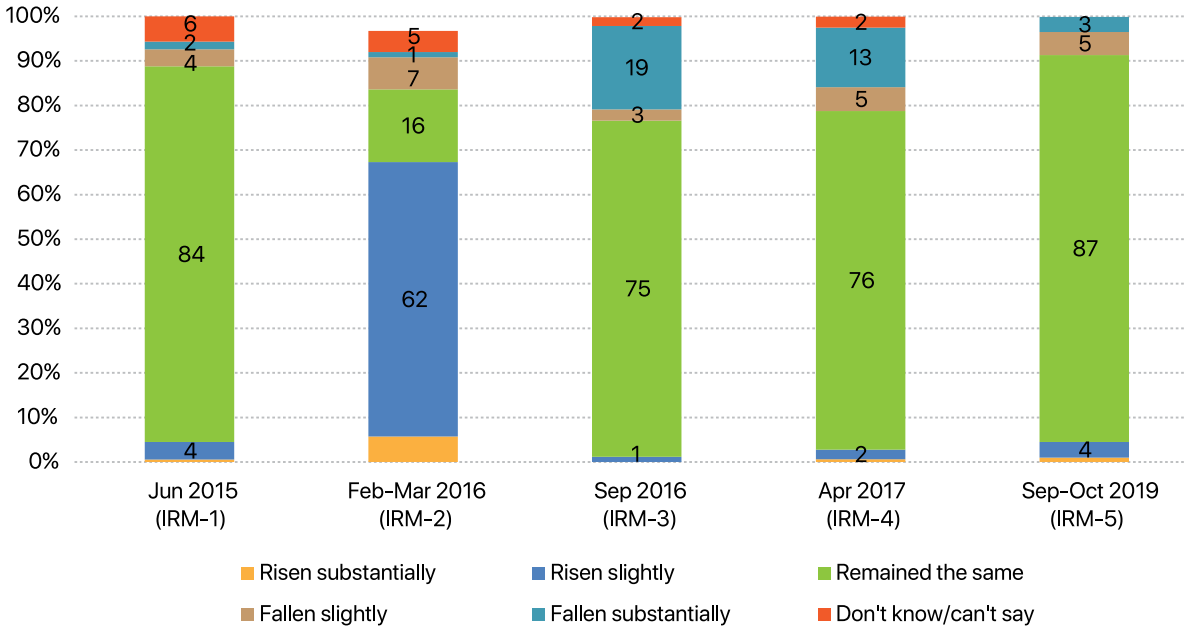
Figure 9.4: Share of people saying there was a violent incident in the community in the past year – by gender (IRM-1 base= 2,980, IRM-2 base=4,850, IRM-3 base=4855, IRM-4 base=4,854, IRM-5 base=5,857, weighted)



Changes in crime rate

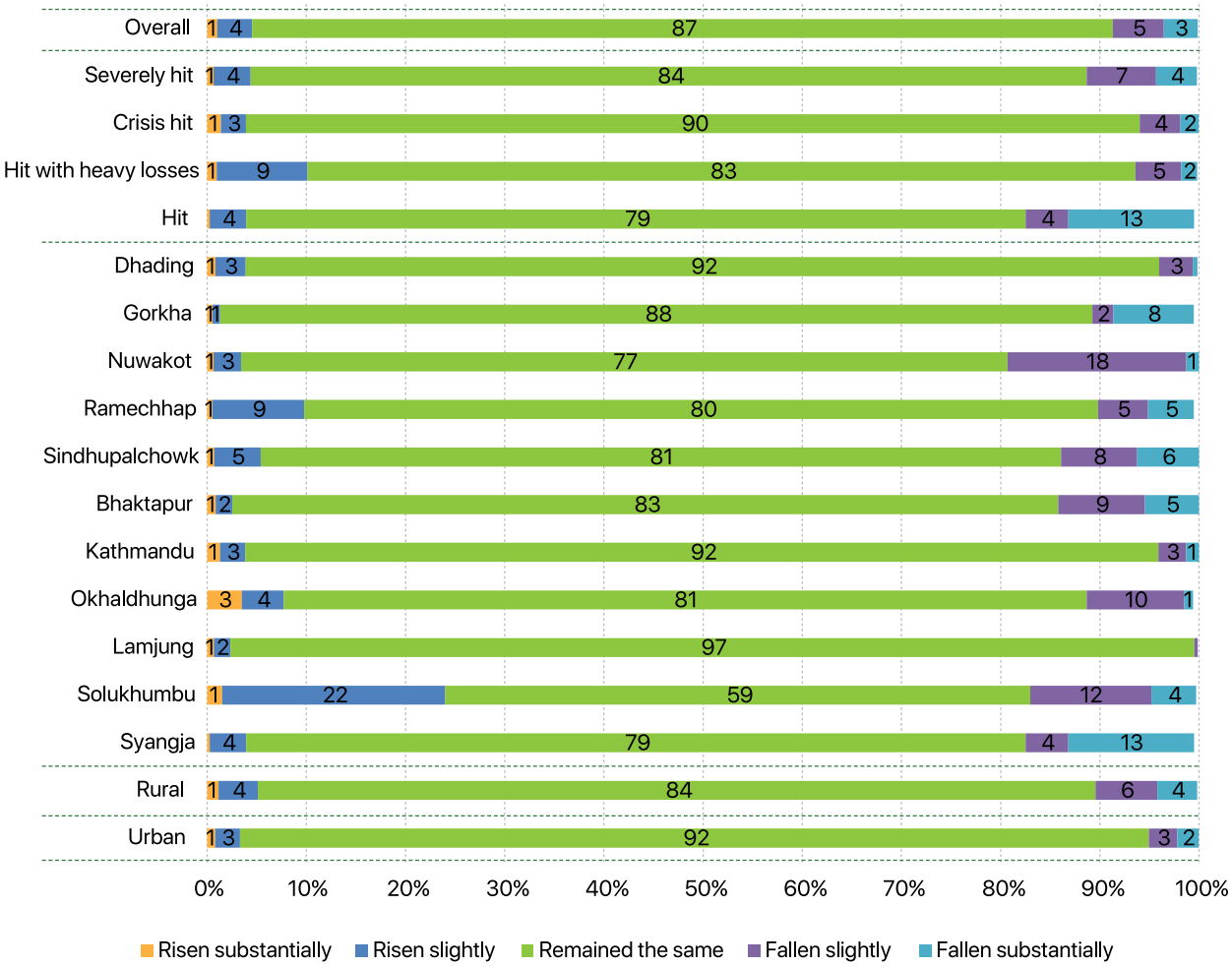
Respondents were asked whether and how the crime rate in their community had changed since the earthquake. In IRM-5 (Sept-Oct 2019), the majority (87%) said that the crime rate had remained the same (Figure 9.5). Eight percent thought it had decreased, and five percent thought the crime rate had increased. These findings were similar to answers given in IRM-1 (June 2015). In IRM-2 (Feb/Mar 2016), however, people were less positive, with 68 percent reporting increased crime rates (6% risen substantially, 62% risen slightly), while only 16 percent thought it had stayed the same, and eight percent reported decreased crime rates. The remaining shares were unsure or refused to answer. Between IRM-3 (Sep 2016) and IRM-5 (Sep-Oct 2019), the shares reporting fallen crime rates became progressively smaller, while the shares reporting that the crime rate had stayed the same increased. During the same period, the shares reporting rising crime rates were small, but increased from 1 percent in IRM-3, to five percent in IRM-5 (Figure 9.5).

Figure 9.5: Change of crime rate in the community since the earthquake (IRM-1 base= 2,980, IRM-2 base=4,850, IRM-3 base=4855, IRM-4 base=4,854, IRM-5 base=5,857, weighted)



Compared to the overall share of respondents in IRM-5 who reported that the crime rate had risen (5% said it rose slightly or substantially), higher shares reported increases in the crime rate in Solukhumbu (23%) and in Ramechhap (10%). On the other hand, the shares of respondents stating that the crime rate has decreased were largest in Nuwakot (19%), Syangja (17%), Solukhumbu (16%), and Gorkha (10%) (Figure 9.6).

Figure 9.6: Change of crime rate in the community since the earthquake – by district impact, district and rural/urban (IRM-5, weighted, base=5857)



9.2 Social cohesion

Trust in Institutions

Respondents were asked how much they trusted certain people and institutions in the country. Trust was fairly high, with at least half of respondents either fully or moderately trusting all people and institutions specified in the survey. The most trusted institutions were the media (92%), CBOs (85%), and the Nepal Army (83%). Amongst the individuals specified, respondents were most likely to trust their Ward Chairperson (70%). Among the least trusted institutions ('don't quite trust' or 'don't trust at all') were political parties (48%), followed by the provincial government (41%), and federal government (39%) (Table9.2).

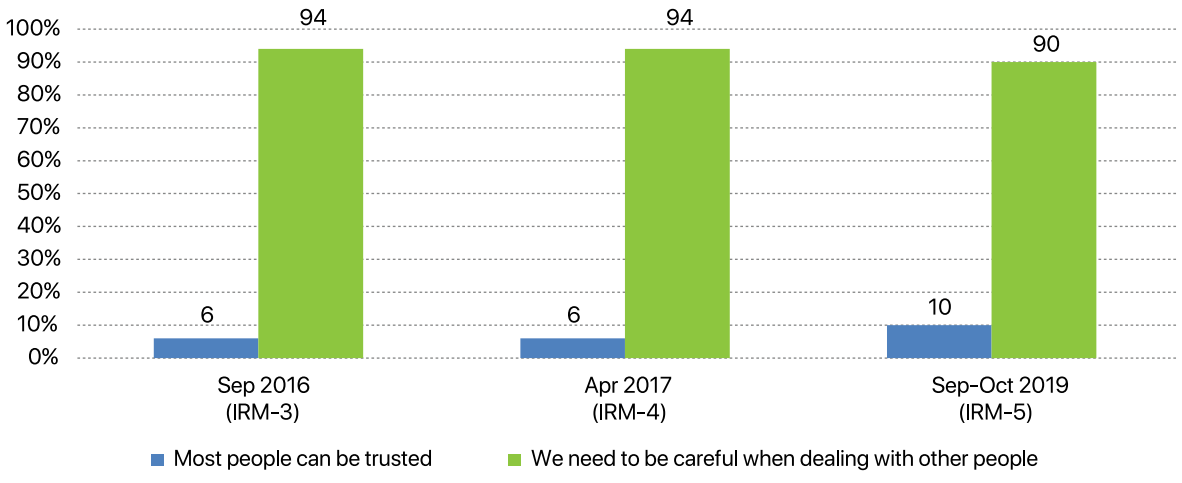
Table 9.2: Trust in institutions (IRM-5, base=5857, weighted)

	Fully trust	Moderately trust	Don't quite trust	Don't trust at all	Don't know/ can't say
	%	%	%	%	%
The media (television, radio, newspapers)	40	52	6	1	1
Nepali Army	37	46	10	6	1
Public Service Commission	33	42	8	3	12
CBOs (womens' groups, savings and credit groups)	32	53	9	3	3
Armed Police Forces	31	47	12	7	2
Police	30	42	17	10	1
Courts	29	45	14	7	4
Ward Chairperson	27	43	17	12	1
Judicial Committees	25	43	17	9	6
NGOs/Human rights defenders	23	53	14	4	5
Mayor/Rural Municipality Chair	21	45	20	12	1
Religious/caste-based organizations	21	52	16	7	4
Local government	19	43	21	15	2
Local political leaders	19	42	22	15	1
Federal government	18	40	23	16	3
Provincial government	14	41	24	17	3
Political parties	13	37	26	22	1

Trust in other people

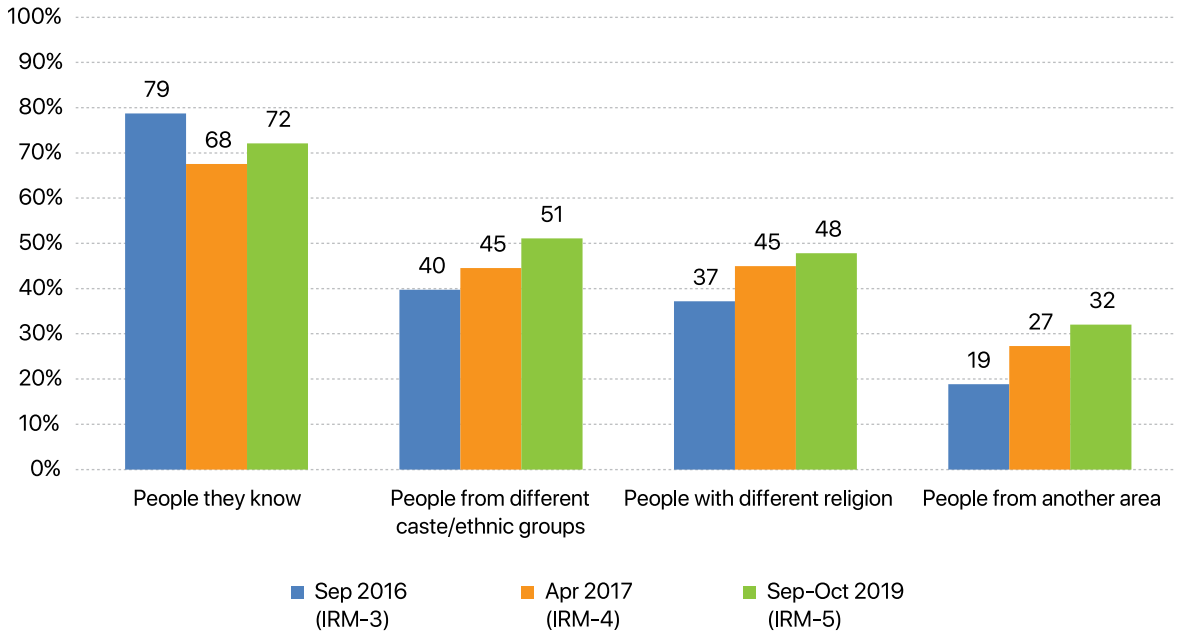
Respondents were also asked whether they thought that other people could be trusted or whether one should be very careful in dealing with other people. Between IRM-3 (Sep 2016) and IRM-5 (Sep-Oct 2019), the large majority (over 90%) thought it was better to be careful when dealing with others. The share who said that others can be trusted was small, but increased from six percent to 10 percent in the same period (Figure 9.7).

Figure 9.7: Share trusting/distrusting other people (IRM-3 base=4,855, IRM-4 base=4,854, IRM-5 base=5,857, weighted)



Respondents were asked whether or not they trusted different groups of people. Almost three-fourths of respondents (72%) trusted the people they knew, a little over half (51%) trusted people from a different caste, slightly less than half (48%) trusted people belonging to a different religion, and one-third (32%) trusted people from a different area. Notably, trust for other groups increased between IRM-3 and IRM-5. Still, in IRM-5 seven out of ten (68%) respondents did not trust people who came from another area, more than half (52%) did not trust people belonging to a different religion, and a similar share of respondents (49%) did not trust people from a different caste.

Figure 9.8: Share trusting different groups of people (IRM-3 base=4,855, IRM-4 base=4,854, IRM-5 base=5,857, weighted)



Residents of rural areas were more likely to trust others than those in urban areas (Table 9.3). Residents of Kathmandu were the least likely to trust people from another area (21%). The share of respondents who reported that they trusted people from a different caste (77%) and people from a different religion (71%) was the highest in Nuwakot. Respondents in crisis-hit districts were less likely than respondents in other district impact categories to report that they trusted people they knew (63%), primarily due to the fact that the three crisis-hit districts selected include the urban districts of Kathmandu and Bhaktapur (Table 9.3).

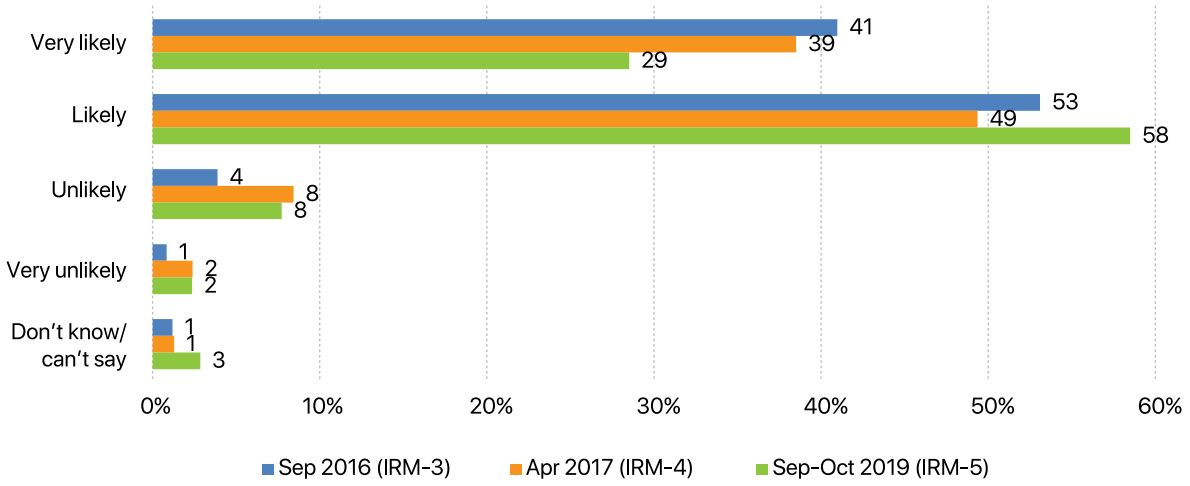
Table 9.3: Share trusting different groups of people – by districts impact, district and rural/urban (IRM-5, weighted, base=5,857)

	People they know	People from another area	People from different caste/ethnic groups	People with different religion
	%	%	%	%
Overall	***72***	***32***	***51***	***48***
Severely hit	**83**	**38**	**59**	**55**
Dhading	90	39	53	49
Gorkha	87	26	61	55
Nuwakot	88	52	77	71
Ramechhap	73	39	53	55
Sindhupalchowk	73	35	49	47
Crisis hit	63	25	45	42
Bhaktapur	77	31	47	45
Kathmandu	59	21	44	40
Okhaldhunga	88	55	64	63
Hit with heavy losses	**84**	**39**	**47**	**46**
Lamjung	90	29	36	34
Solukhumbu	73	57	67	65
Hit	**82**	**55**	**64**	**61**
Syangja	82	55	64	61
Rural	77	39	56	52
Urban	62	18	42	39

Cooperation in the community

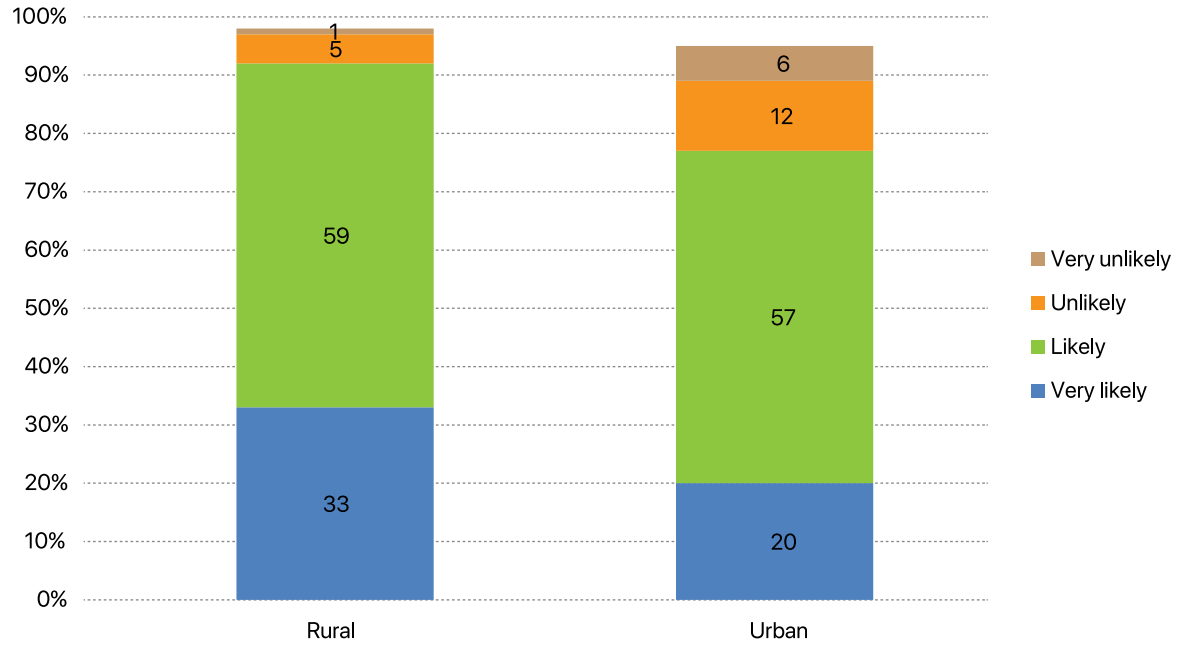
The last three IRM surveys asked respondents whether they would be willing to conserve food and water in the case of an emergency, if requested by public officials as a measure of cooperative behavior. While each time, a majority of respondents said that they would likely conserve food and water if asked, the share who said they would be 'very likely' to do so declined over the years (by 12 percentage points between IRM-3 in IRM-5) (Figure 9.9). The share who said they would be 'unlikely' to do so remained small, but doubled between IRM-3 and IRM-4/IRM-5. The share who said they would be 'likely' to conserve food and water increased slightly over the years (by five percentage points between IRM-3 and IRM-5) (Figure 9.9).

Figure 9.9: Likelihood of people in the community conserving food or water if asked by the government in case of an emergency (IRM-3 base=4855, IRM-4 base=4,854, IRM-5 base=5,857, weighted)



People in urban areas were less likely than those in rural areas to cooperate in case of an emergency (Figure 9.10).

Figure 9.10: Likelihood of people in the community conserving food or water if asked by the government in case of an emergency – by rural/urban (IRM-5, weighted, base=5,857)



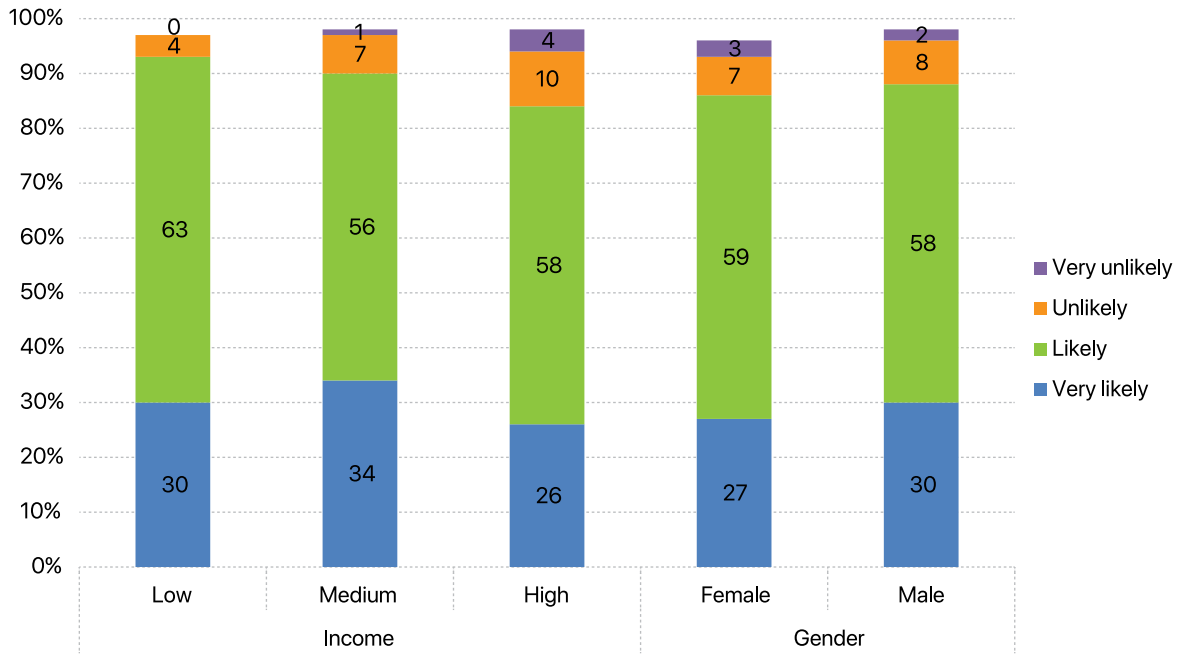
Over time, the share of people who said they would be 'very likely' to cooperate to conserve food and water if ask decreased by more than half in Sindhupalchok, Kathmandu, and Lamjung. It also decreased in Dhading. On the other hand, the share who said they would be 'very likely' to cooperate increased in Gorkha, Nuwakot, Bhaktapur, and Solukhumbu. In Nuwakot, it increased more than nine-fold between IRM-3 and IRM-5 (Table 9.4).

Table 9.4: Share saying people in their community would be very likely to conserve food or water if asked by the government in case of an emergency – by district impact and district (IRM-3 base=4855, IRM-4 base=4,854, IRM-5 base=5,857, weighted)

	Sep 2016 (IRM-3)	Apr 2017 (IRM-4)	Sep-Oct 2019 (IRM-5)
	%	%	%
Overall	***38***	***32***	***29***
Severely hit	**40**	**32**	**35**
Dhading	30	46	24
Gorkha	22	35	34
Nuwakot	6	30	58
Ramechhap	39	24	32
Sindhupalchowk	74	39	30
Crisis hit	**31**	**32**	**22**
Bhaktapur	27	39	39
Kathmandu	56	48	19
Okhaldhunga	27	23	24
Hit with heavy losses	**26**	**27**	**18**
Lamjung	25	26	6
Solukhumbu	28	29	41
Hit	**67**	**42**	**57**
Syangja	67	42	57

Similar shares of men and women reported that their community would be likely to cooperate to conserve food or water during an emergency. The likelihood of conserving food and water declined slightly with increases in income level.

Figure 9.11: Likelihood of people in the community conserving food or water if asked by the government in case of an emergency – by income and gender (IRM-5, weighted, Base=5,857)

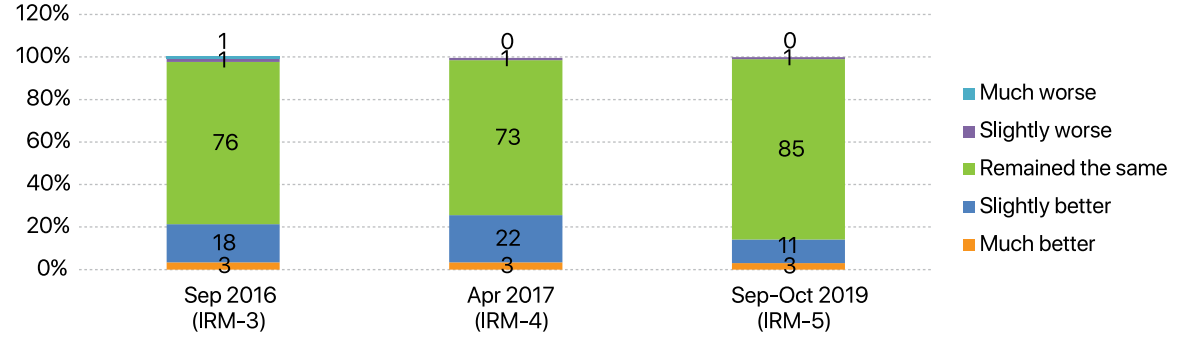


Relations with neighbors

Respondents were also asked how the earthquake had affected their relations with neighbors. The majority of respondents (85%) reported that relations with their neighbors had remained the same, 14 percent said relations had become better (11% slightly better, 3% much better), while only one percent said relations were worse (1% slightly worse, 0% much worse) (Figure 9.12).

In IRM-5 (Sep/Oct 2019), fewer people said that their relations with neighbors had improved since the earthquake, compared to IRM-3 (Sep 2016) and IRM-4 (Apr 2017). Since IRM-4, the share of respondents who said that their relations with neighbors had become slightly better after the earthquake decreased by half (Figure 9.12).

Figure 9.12: Changes in relationships with neighbors after the earthquake – IRM-3 to IRM-5 (IRM-3 base=4855, IRM-4 base=4,854, IRM-5 base=5,857, weighted)



Similar to other findings on social cohesion, residents of rural areas were more positive. People in rural areas were more likely to report that relations with neighbors had improved (19%) compared to those in urban areas (4%). However, people in urban areas were not reporting worsening relations – instead, they were more likely to say that relations had remained the same. The proportion of respondents who reported that their relations with neighbors had improved was comparatively higher in Ramechhap (47%) and Solukhumbu (46%). The lowest share of respondents stating that their relations had become either slightly better or much better were in Lamjung (3%) and Kathmandu (4%) (Table 9.5).

Table 9.5: Relations with neighbors after the earthquake – by district impact, district and rural/urban (IRM-5, weighted, Base= 5,857)

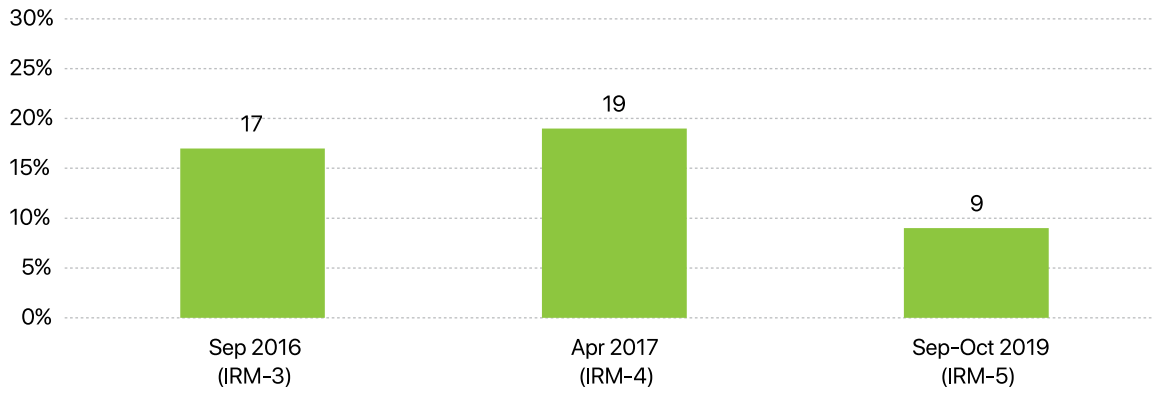
	Remained the same	Better (slightly or much better)	Worse (slightly or much worse)
	%	%	%
Overall	***85***	***14***	***1***
Severely hit	**73**	**26**	**1**
Dhading	80	19	0
Gorkha	81	18	1
Nuwakot	81	18	2
Ramechhap	52	47	1
Sindhupalchowk	61	38	0
Crisis hit	**93**	**6**	**1**
Bhaktapur	89	10	1
Kathmandu	95	4	1
Okhaldhunga	70	29	1
Hit with heavy losses	**79**	**19**	**2**
Lamjung	95	3	2
Solukhumbu	52	46	1
Hit	**86**	**15**	**0**
Syangja	86	15	0
Rural	79	19	1
Urban	95	4	1

9.3 Illness and psychological effects

Illness due to problems with shelter

The IRM surveys captured whether earthquake-affected people had fallen sick due to problems with their housing conditions and adverse weather, such as winter or monsoon, depending on when the survey took place. In IRM-5 (Sept-Oct 2019), respondents were asked if anyone fell ill during the past monsoon due to their housing conditions. Nine percent said someone in their family fell ill during monsoon due to shelter issues. More people had reported falling ill in IRM-4 (19%) during the winter and in IRM-3 (17%) during the monsoon (Figure 9.13).

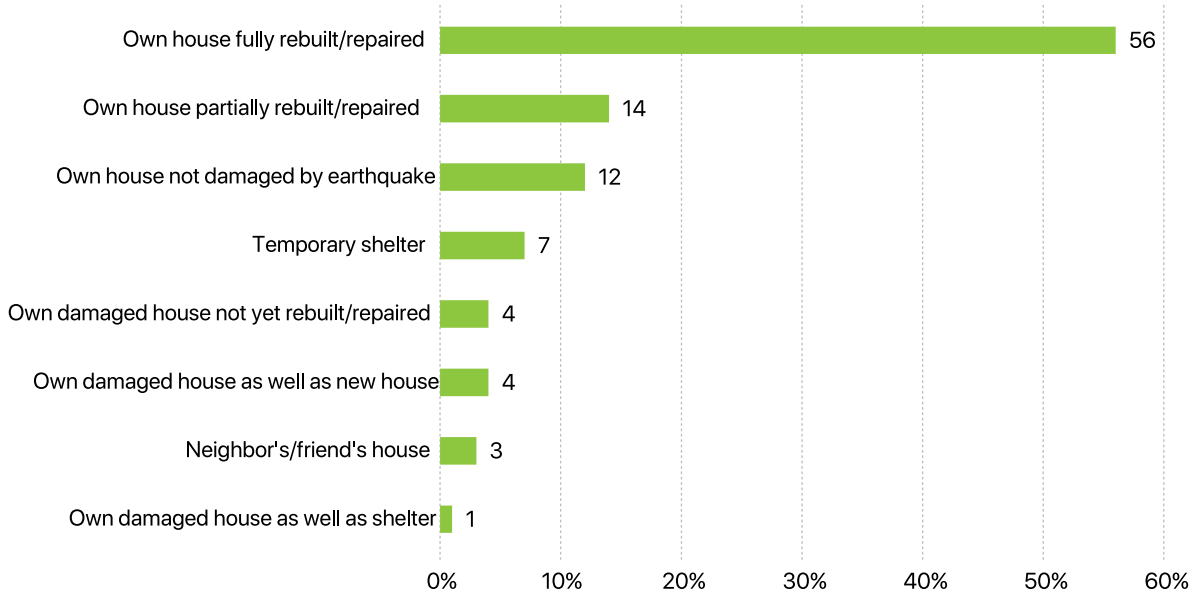
Figure 9.13: Share of people who said someone in their family got sick due to shelter issues (IRM-3 base=4855, IRM-4 base=4,854, IRM-5 base=5,857, weighted)



The nine percent of respondents who reported that a family member had fallen ill during the monsoon due to housing/shelter conditions were further asked how many of their family members had fallen sick. Most (72%) reported that only one family member had fallen ill. More than one in five (23%) said that two family members had fallen ill, and three percent reported that three or more members of their family had fallen ill.

The share who reported that someone in their family got sick in monsoon season tracked with where people were living in IRM-5 (Chapter 2): Most people were now living in fully repaired/reconstructed houses, and they were also the ones most likely to report an illness in the family (56% of people in fully recovered housing said someone in the family got sick, compared to much lower shares in other housing arrangements).

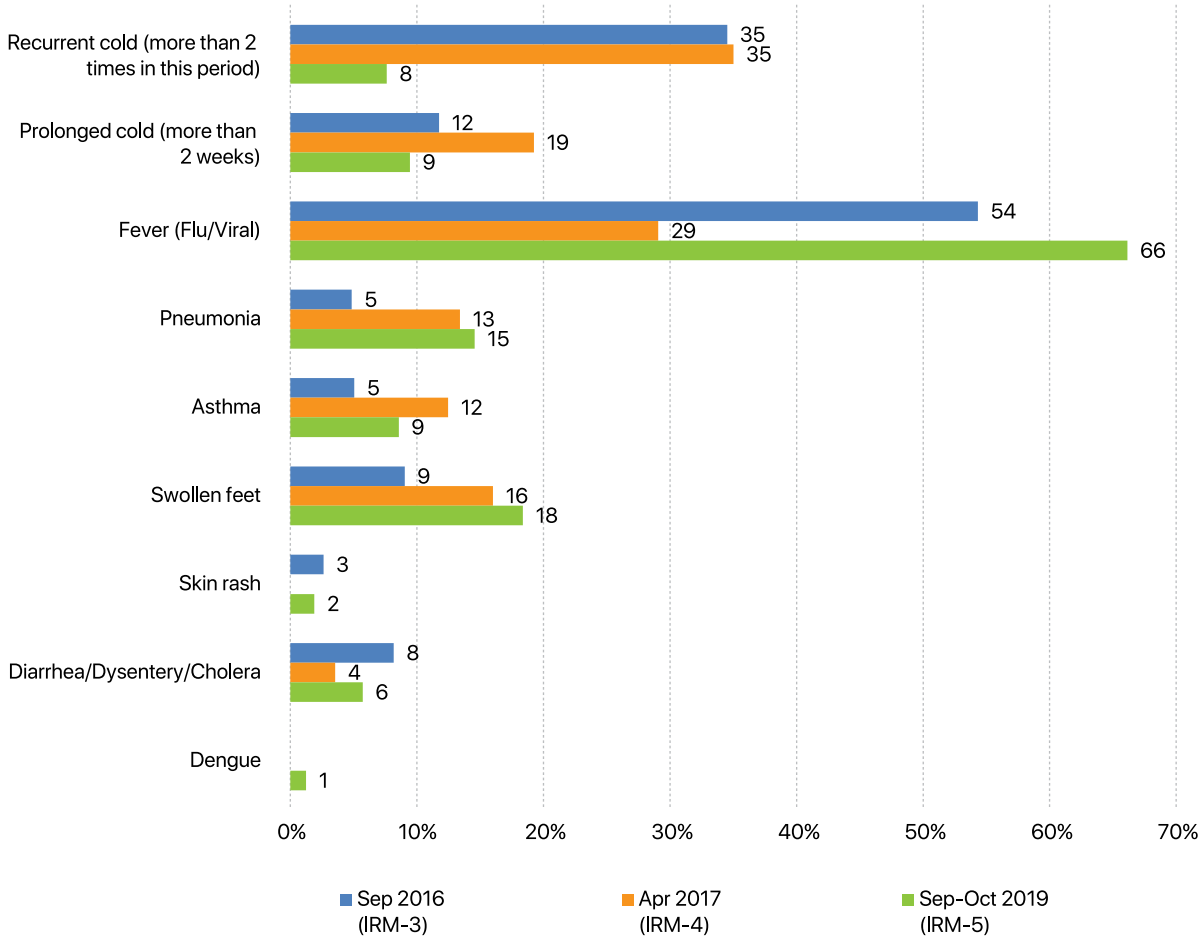
Figure 9.14: Current living situation of those who said someone in their family got sick due to shelter issues (IRM-5, weighted, base=531)



Types of illnesses

Respondents who reported an illness in their family due to shelter conditions in the last monsoon were asked to mention the type of illness. The most common form of illness was fever/flu (66%). Other illnesses cited included swollen feet (18%), pneumonia (15%), asthma (9%), prolonged cold (9%), recurrent cold (8%), and diarrhea/dysentery/cholera (6%). Less commonly reported illnesses were skin rash (2%) and dengue (1%).

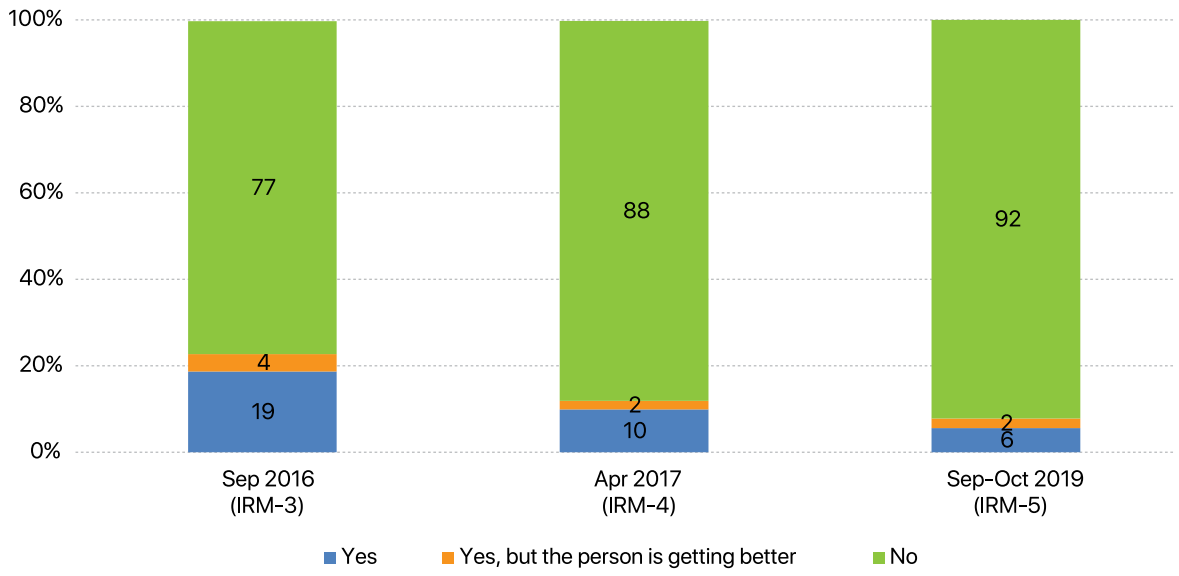
Figure 9.15: Illness prevalence amongst those whose family member(s) got ill (IRM-5, weighted, base=531)



Psychological effects from the earthquake

All respondents were asked if any of their family members still suffered from psychological effects from the earthquake. Over the years, the share of people with trauma had reduced, with fewer people reporting that a family member still suffered from psychological effects from the earthquake (Figure 9.16).

Figure 9.16: Share of people reporting psychological effects from the earthquake (IRM-3 base=4855, IRM-4 base=4,854, IRM-5 base=5,857, weighted)



Compared to respondents in urban areas (3%), those in rural areas (7%) were more likely to report psychological effects of their family members. Lasting psychological effects from the earthquake were more common in Gorkha (32%), Dhading (14%), Okhaldhunga (12%), and Syangja (12%), and comparatively less common in Solukhumbu (1%), Lamjung (1%), and Kathmandu (1%).

Respondents whose houses had been completely destroyed were slightly more likely to say they had a family member who still suffers psychological effect from the earthquake (8%), compared to those who suffered lesser or no housing damage (between 2-5%).

Types of psychological problems

The most commonly cited psychological effect that people suffered from due to the earthquake was extreme fear (55%), followed by nervousness (23%) and trouble sleeping (17%). Over the years, there was a substantial increase in people suffering from nervousness and slight increases in respondents reporting extreme fear. Fewer mentioned getting startled while sleeping as a psychological effect of the earthquake in IRM-5 than in previous survey rounds.

Figure 9.17: Type of psychological effects (IRM-3 base=4855, IRM-4 base=4,854, IRM-5 base=5,857, weighted)

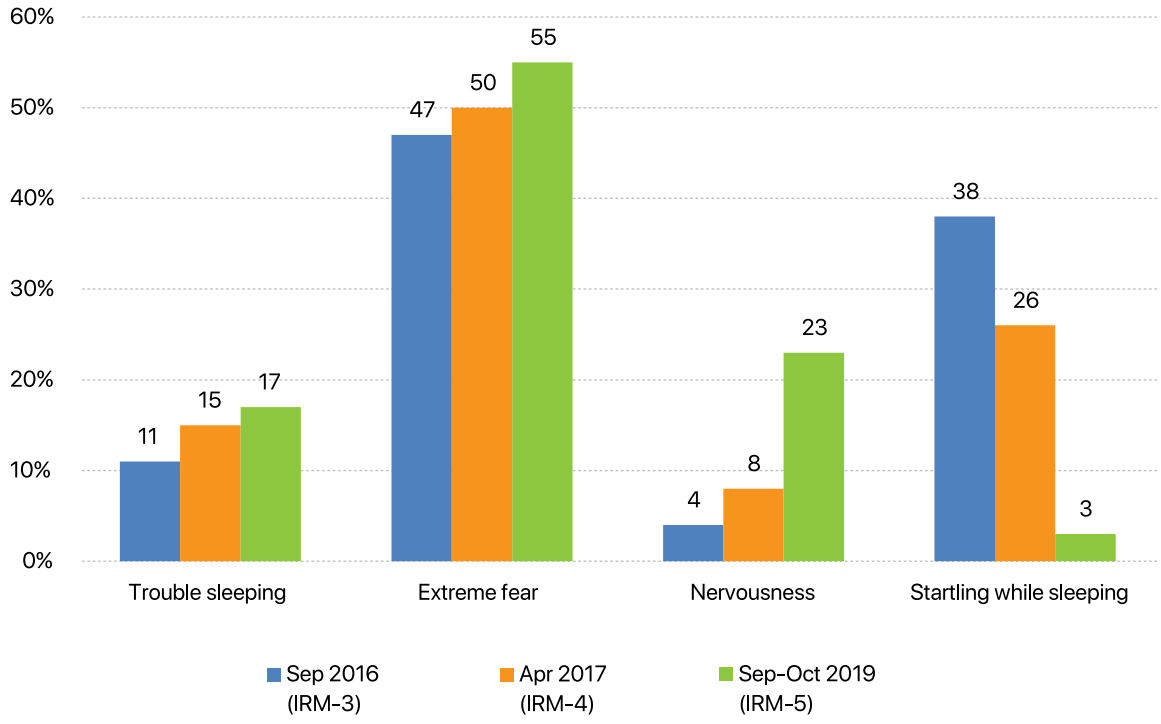
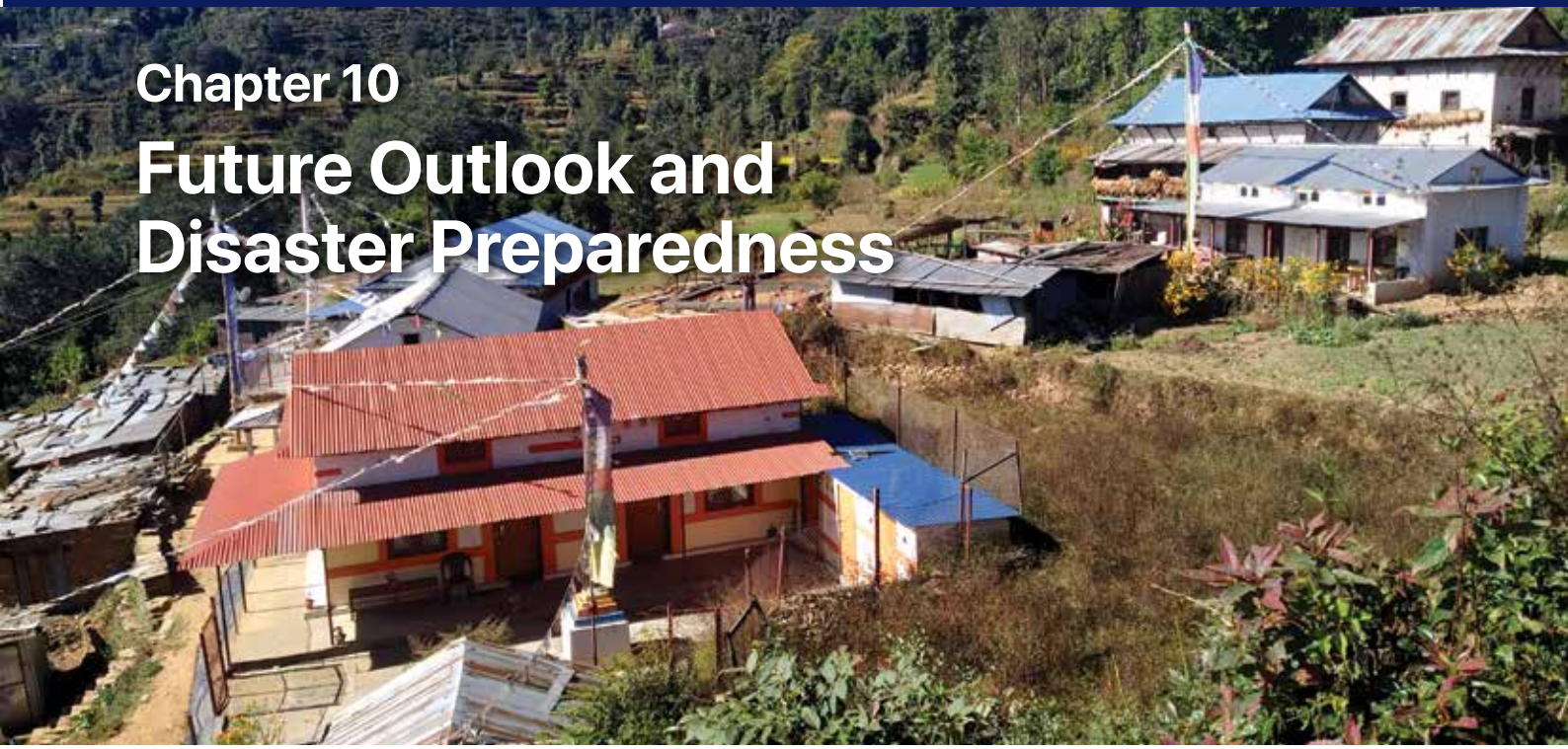


Photo: Pallavi Payal (Bhaktapur)



Chapter 10
Future Outlook and Disaster Preparedness

Photo: Aruna Limbu (Lisankhu, Sindhupalchowk)

This chapter discusses respondents' perceptions of the future outlook for the country and their own locality, and of future disaster preparedness in general. More specifically, the chapter presents whether people feel prepared, reasons for being prepared or unprepared, advice for other people and the government to prepare for future disasters, and positive aspects of, and learning from, this reconstruction process.

Key Findings

Disaster preparedness

- Six in ten say they feel prepared for future natural disasters, about one-third say they do not feel prepared[1]. Respondents in the low income bracket, with no formal education, residing in severely hit districts, and in rural areas were comparatively more likely to feel prepared if a disaster struck again in their community.

- Building houses on safe land and constructing earthquake-resilient houses, based on government guidelines, were the main factors influencing whether or not people feel prepared for future disasters. These are also the top two recommendations people in earthquake-affected areas give to people elsewhere in the country and to the government for future preparedness. However, while these individual measures were cited most frequently, many also said government measurements, such as prevention, information-sharing, and forming rescue and relief teams, were also important.

1 The share 'prepared' is reported combining the categories: very prepared, somewhat prepared, and prepared. The share 'not prepared' is reported combining the categories: not prepared, not at all prepared, and do not know how to prepare for future disasters.

Perceptions of the reconstruction process

- When assessing the reconstruction process, people were most positive about the ability to reconstruct houses according to NRA standards: Around one in three said they found this aspect to be most positive about earthquake reconstruction. A similar share said they found nothing positive about the reconstruction process. More than twice as many people in urban areas said there was nothing positive about the reconstruction process, pointing to the list of challenges they faced with reconstruction in urban areas, where progress has been slower.

Future outlook of the country

- Slightly more than half (52%) of people in earthquake-affected districts said things in Nepal are moving in the right direction, but four in ten (43%) believe the country is moving in the wrong direction. People in the urban districts of Kathmandu and Bhaktapur were more negative about the direction of the country than those in the other districts.

- People had a more optimistic outlook about their own locality than the nation. Nearly seven in ten (69%) said conditions in the place they live and work in are improving, and three in ten (28%) said things are getting worse.

- Similar patterns emerged across demographic groups when comparing results for their outlook on the nation and their own locality. Optimism was highest among the youngest group, and declined with increases in income and education. People in rural areas were optimistic, while those in urban areas were pessimistic.

10.1 Perceptions of disaster preparedness

How prepared do people feel for future disasters

In IRM-5 (September-November 2019), for the first time in the IRM survey, people were asked how prepared they feel for future natural disasters. Six in ten said they feel prepared (14% very prepared, 22% somewhat prepared, and 24% prepared), while one-third said they feel unprepared or do not know how to prepare for disasters (26% not prepared, 6% not at all prepared, and 2% don't know/ can't say).

Respondents in districts more severely impacted by the earthquake felt better prepared for future disasters. Residents of districts severely hit (85%) or hit with heavy losses (76%) were much more likely than residents of districts crisis hit (46%) and hit (31%) to report that they felt prepared for future natural disasters. People in Nuwakot (94%) were the most likely and those in Syangja (31%) and Kathmandu (43%) were the least likely to feel prepared. People in rural areas (69%) were slightly more likely than those in urban areas (60%) to feel prepared (Table 10.1).

Table 10.1: Feeling of preparedness for future natural disasters – by district impact, district, and rural-urban (IRM-5, weighted, base=5,857)

	Very Prepared/ Somewhat Prepared/ Prepared	Not Prepared/ Not at all Prepared/ Do not have knowledge on preparing against disasters
	%	%
Overall	***60***	***34***
Severely Hit	**85**	**12**
Dhading	80	15
Gorkha	81	13
Nuwakot	94	6
Ramechhap	87	13
Sindhupalchowk	86	13
Crisis Hit	**46**	**45**
Bhaktapur	59	34
Kathmandu	43	48
Okhaldhunga	68	28
Hit with heavy losses	**76**	**22**
Lamjung	74	25
Solukhumbu	79	15
Hit	**31**	**68**
Syangja	31	68
Rural	69	27
Urban	60	34

Income and education levels seem to impact feeling of preparedness. Only half of those in the high income bracket (52%) said they feel prepared, whereas seven in ten in the low income (72%) and middle-income (69%) groups said the same. Apart from those who completed a Master's level education; those with lower levels of education tended to say they feel prepared for future disasters (Table 10.2).

The difference in feelings of preparedness between men and women was insignificant: Men (62%) were only slightly more likely than women (58%) to feel prepared. However, there was variation by caste and ethnicity: Over six in ten of those belonging to Hill castes (63%), including Hill Dalits, (64%) and Hill ethnic groups (67%) felt prepared, compared to only 46% of Newars.

Table 10.2: Feeling of preparedness for future natural disasters – by education, income, gender (IRM-5, weighted, base=5,857)

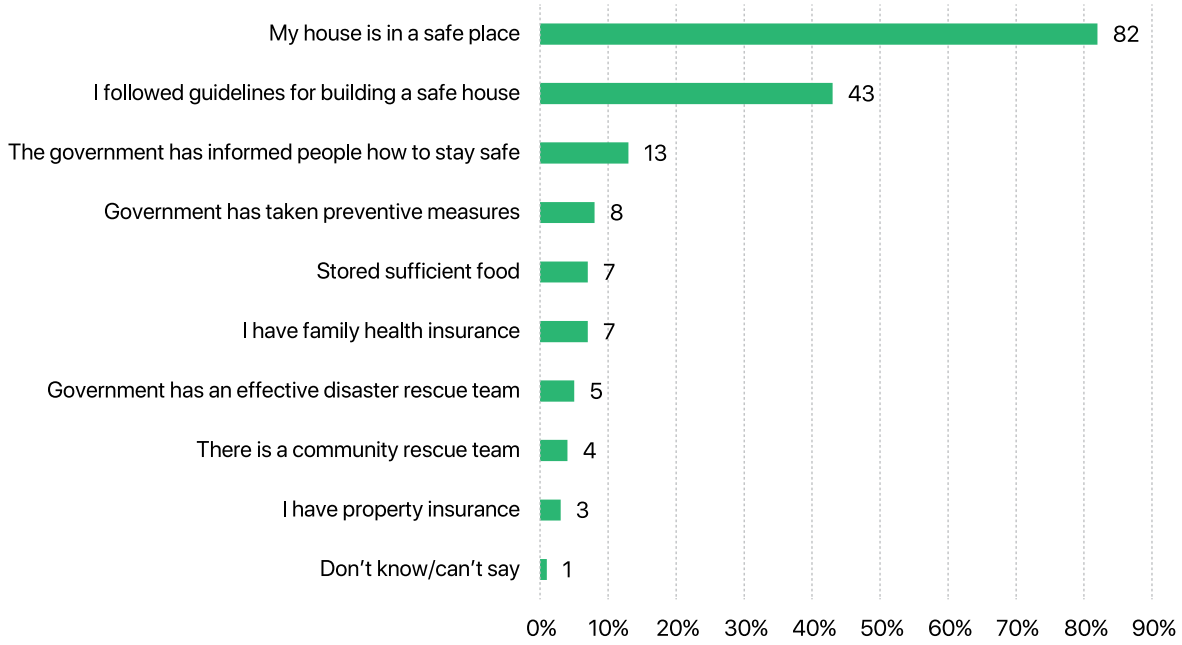
		Feel prepared (Very prepared/ somewhat prepared/prepared)	Do not feel prepared (Not prepared/not at all prepared/Don't know or can't say)
		%	%
Overall		***60***	***34***
Income	Low Income	72	24
	Medium Income	69	28
	High Income	52	41
Gender	Female	58	36
	Male	62	33
Education	Illiterate	63	32
	Literate	72	23
	Primary Level	64	32
	Lower Secondary Level	64	32
	Secondary Level	55	45
	SLC Pass	51	37
	+2/Intermediate Pass	51	44
	Bachelor Pass	37	56
	Master & Above	59	32

Reasons for feeling prepared for future disasters

Of the sixty percent of respondents who said they feel prepared for future disasters, the main reasons for feeling so were having built a house in a safe place (85%) and having followed disaster preparedness guidelines in rebuilding or repairing their house (43%). Far fewer people said they feel prepared for future disasters because of government preventive measures, whether it was having an effective and efficient disaster plan (5%), taking preventative measures (8%), or information dissemination (13%). Other preparedness measures also ranked low, such as having sufficient food stored (7%), having health insurance (7%), community having a rescue team (4%), and having property insurance (3%) (Figure 10.1).

At least eight in ten in the severely hit, hit with heavy losses, and crisis hit districts said they feel prepared because their house is in a safe place. A relatively high share of respondents in Nuwakot feel prepared for future disasters (66%) due to having followed disaster preparedness guidelines in building their houses. Syangja residents (41%) were the most likely to mention having a rescue team in their community. People in Syangja (22%) and Bhaktapur (22%) were more likely than people in other districts to feel prepared because of health insurance. Similarly, those in Syangja (14%) were also comparatively more likely to feel prepared because they have property insurance.

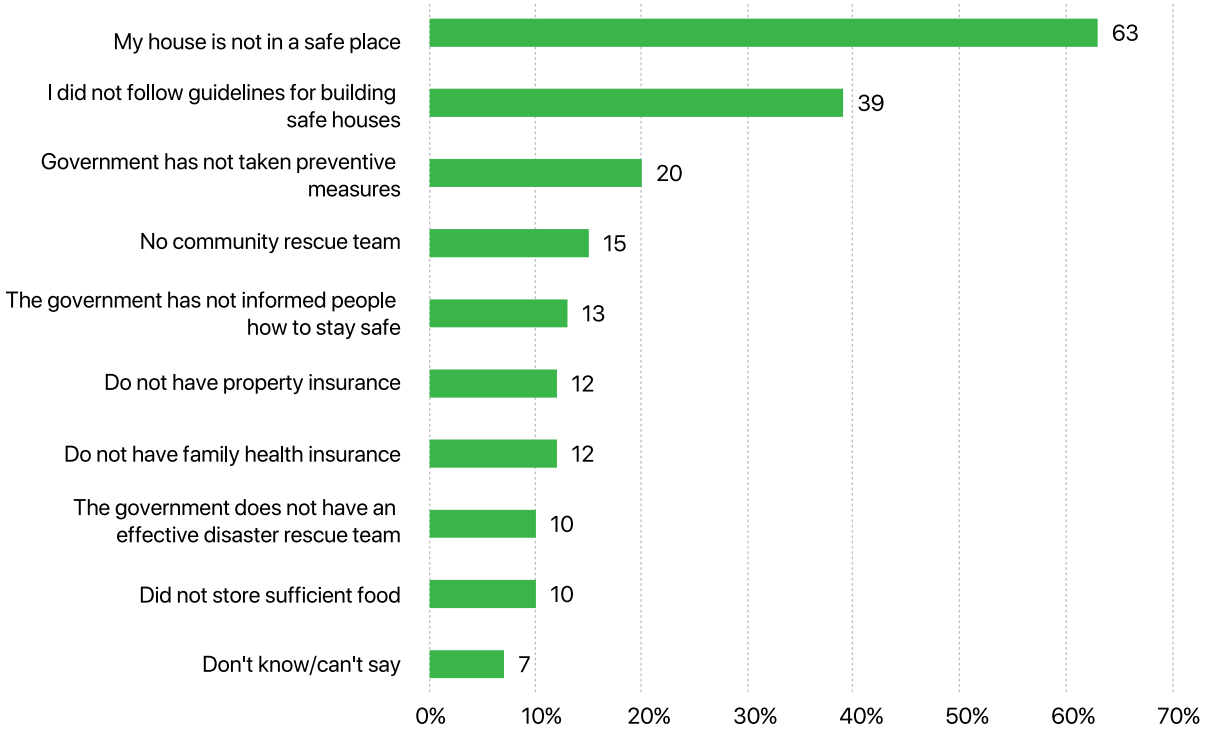
Figure 10.1: Reasons for feeling prepared for future natural disasters (IRM-5, weighted, Base=3,506, asked to those who feel prepared, multiple choice)



Reasons for feeling unprepared for future disasters

Of respondents who said they do not feel prepared or did not know how to prepare for future disasters, the most commonly cited reason was because their house is not in a safe place (63%), followed by not having followed disaster guidelines for building an earthquake-resilient house (39%). One in five felt that the government had not taken enough preventive measures (20%). Less frequently cited reasons were not having a community rescue team (15%), the government not having informed them about how to stay safe during disasters (13%), not having property insurance (12%), not having health insurance (12%), the government not having a rescue team (10%), and because they had not stored sufficient food (10%) (Figure 10.2).

Figure 10.2: Reasons for feeling unprepared for future disasters (IRM-5, weighted, base=2,016, asked to those who feel unprepared, multiple choice)



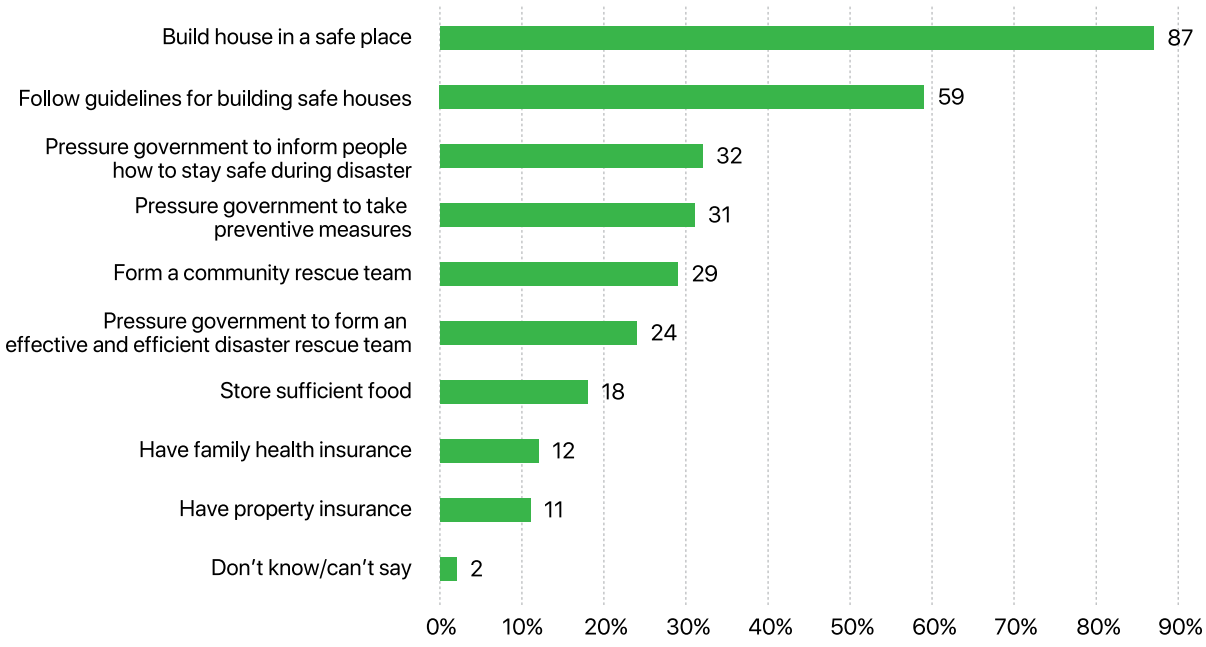
What would help people feel better prepared?

All respondents were asked what information or actions would help them feel more prepared for future disasters and emergencies. Responses track closely with reasons given for why people felt prepared or unprepared. Individual preventive measures, such as building houses in a safe place (85%) and building according to guidelines for resilient buildings (54%) were considered most crucial to improve disaster preparedness. A quarter (25%) thought that the government should take preventative measures for future disasters and a quarter (25%) felt the government should inform people on how to stay safe. Just over one in five (22%) mentioned the presence of rescue teams in the community as a factor, and even fewer said having sufficient food stored (17%), the government having effective rescue teams (16%), or property and health insurance (11% each) were important to prepare for disasters.

Disaster preparedness advice for people in areas not affected by the earthquake

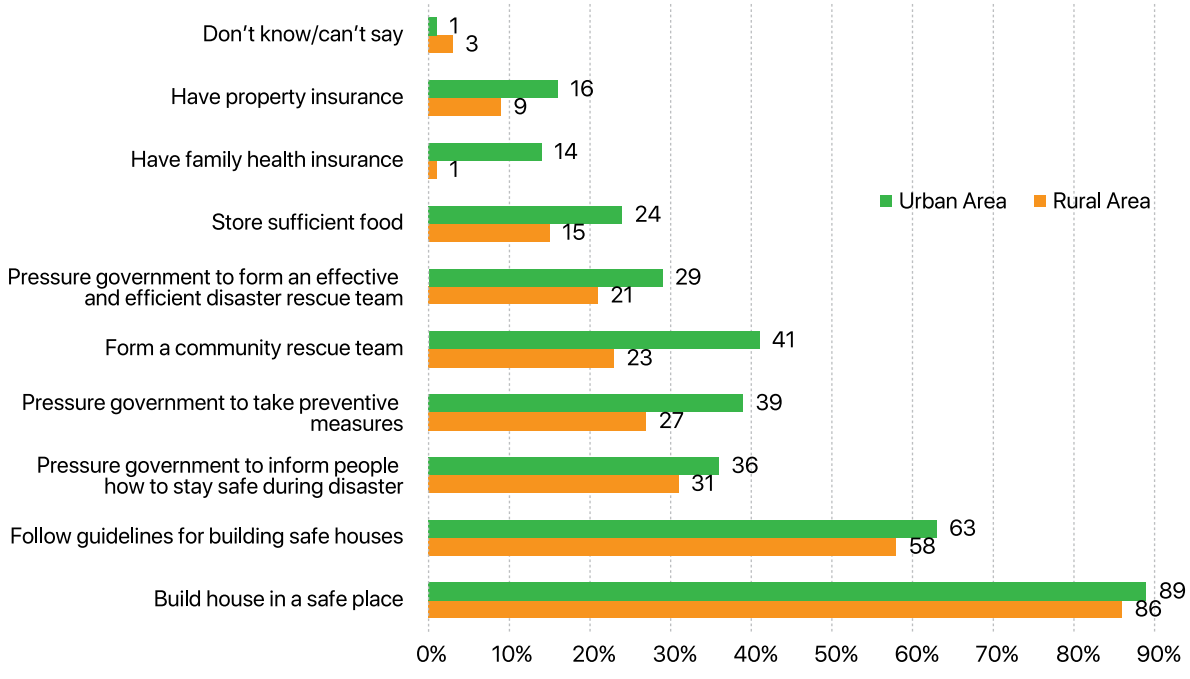
People in earthquake-affected areas were also asked what advice they would give to those elsewhere in the country if an earthquake or similar disaster were to strike there. The most widely shared advice was to build a house in a safer place (87%), followed by building houses according to government guidelines for earthquake-resilient houses (59%). However, the role of government was also seen as crucial. Nearly one in three said that pressuring the government to inform people on how to stay safer during disasters, pressuring the government to take preventive measures, forming a community rescue team, and pressuring the government to form an effective and efficient rescue team were important (Figure 10.3).

Figure 10.3: Measures people elsewhere in the country should take to prepare for disasters (IRM-5, weighted, base=5,857, multiple choice)



People in rural and urban areas differed when asked what they consider important for others to prepare for future disasters. People in urban areas were more likely to consider the following measures important: pressuring the government to take preventive measures, forming a rescue team in the community, storing sufficient food, and having insurance (Figure 10.4).

Figure 10.4: Measures people elsewhere in the country should take to prepare for disasters – by rural/urban (IRM-5, weighted, base=5,857, multiple choice)



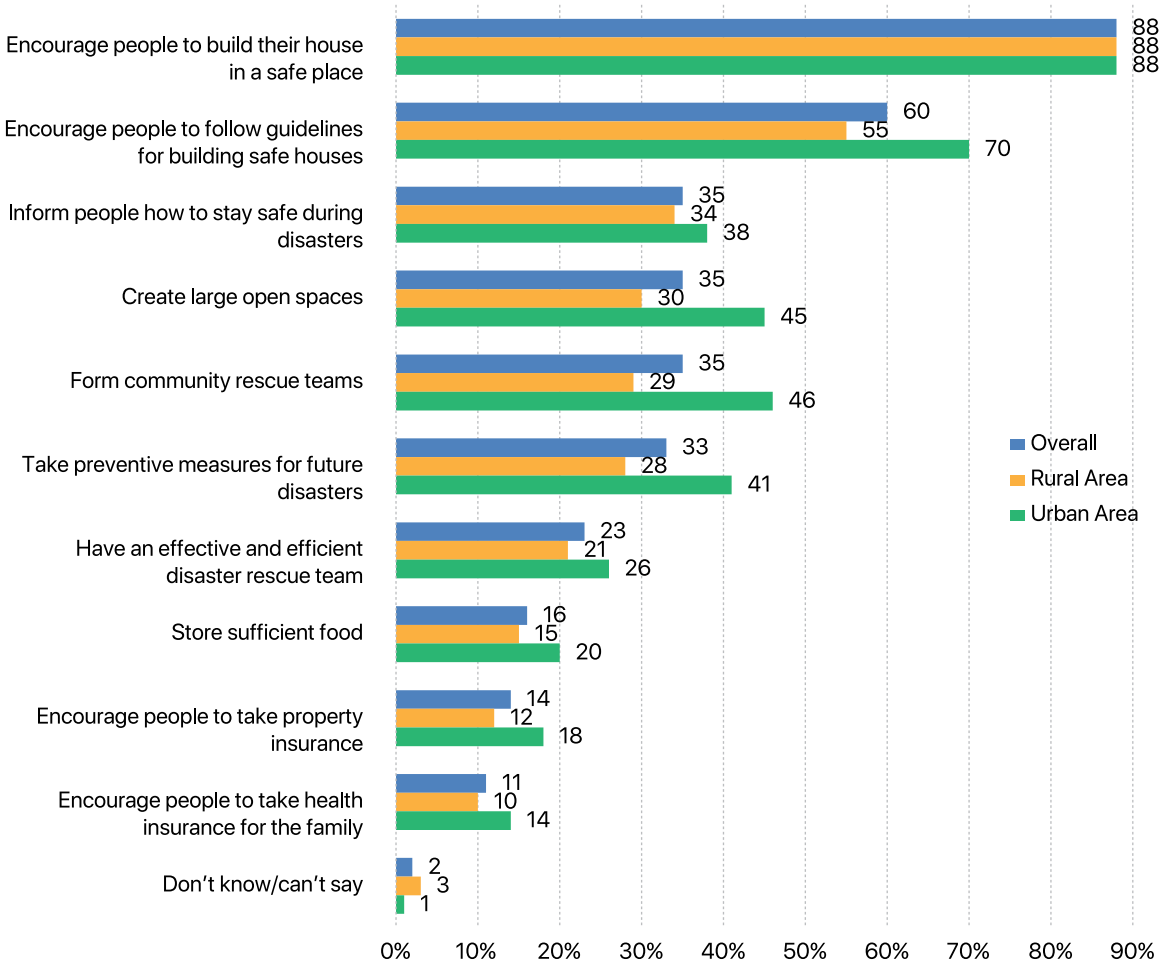
What actions should the government take during future disasters?

Based on their experiences of the post-earthquake reconstruction and recovery period, all respondents were asked what they thought the government (both central and local) could do if a similar disaster were to strike again in the future.

The top recommendations for government were to encourage people to build houses in safe places (88%) and according to safety guidelines (60%). Other commonly cited responses were to inform people on how to stay safe during disasters (35%), make provisions for large open spaces (35%), and take preventative measures against natural disasters (33%). Having effective rescue teams, providing food, and encouraging property insurance and health insurance were mentioned less often (Table 10.4).

People in urban areas were comparatively more likely than those in rural areas to think the government should encourage people to build safe houses, to create large open spaces, to form community rescue teams, and to take other preventative measures (Table 10.4). Regardless of area or district level impacts, a majority of respondents agreed that the most important action for government to take for future disasters is encouraging people to build in a safe place, followed by encouraging people to adhere to guidelines for safe building.

Figure 10.5: Measures the government should take during future disasters – overall and by rural/urban (IRM-5, weighted, base=5,857, multiple answers)

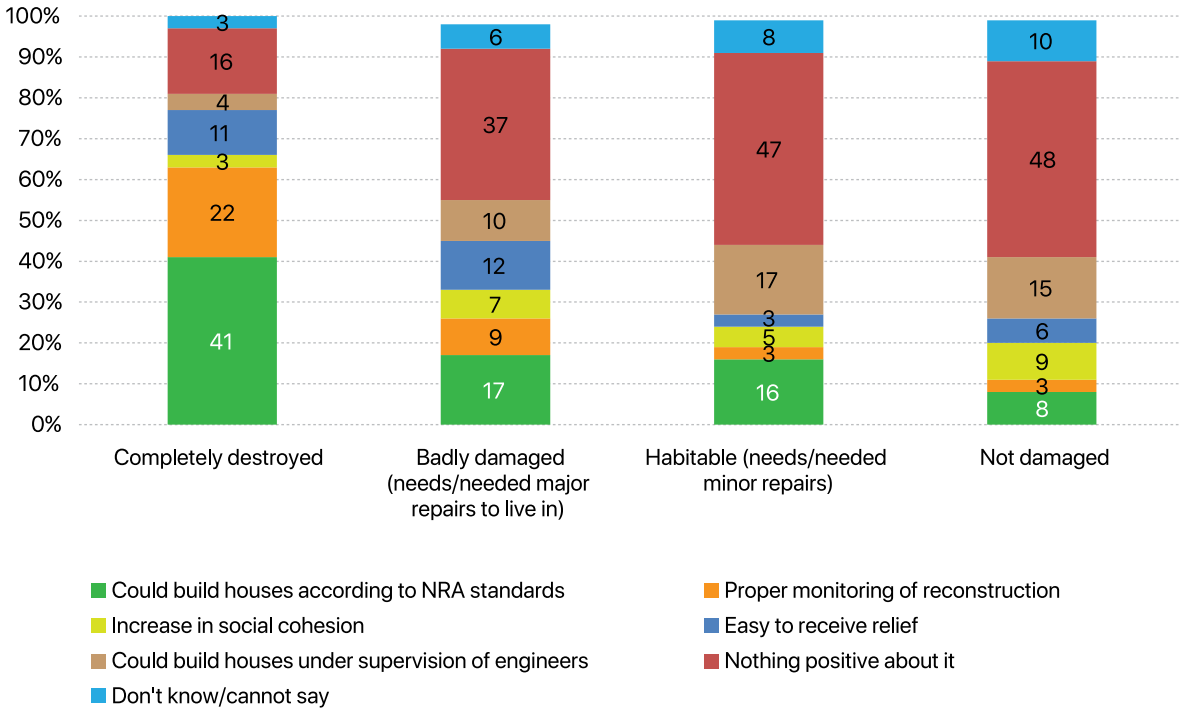


10.2 Perceptions of post-earthquake reconstruction process

All respondents were asked to state what they felt was the most positive aspect of the reconstruction process. Answers given included the ability to rebuild their houses according to standards set by the NRA (27%), ease of getting relief (14%), increase in social cohesion (9%), and ability to build their own house under the supervision of engineers (9%). Only 5% mentioned regular monitoring of reconstruction as a positive aspect.

Among those who reported complete damage to their houses, responses were more positive: Forty-one percent said being able to rebuild based on NRA guidelines was the most positive aspect of reconstruction, and 22 percent mentioned ease of getting relief. The majority of those with lesser housing damage, or no damage, said there was nothing positive about the reconstruction process, or they were unsure. Among the positive aspects of reconstruction mentioned by people with some housing damage (i.e. badly damaged and habitable houses) were the ability to build according to NRA guidelines, building houses with engineer supervision, and social cohesion. People who had minor or no damage mentioned social cohesion and ability to build using NRA guidelines as the most positive aspects.

Figure 10.6: Most positive thing about the reconstruction process – by reported housing damages [IRM-5, weighted, base=5857]



Overall, three in ten (30%) respondents said they did not find anything positive about the reconstruction process. More than twice as many people in urban areas (46%) said there was nothing positive about the reconstruction process, compared to rural respondents (22%) (Table 10.5).

The severely hit districts were more positive about the reconstruction period, perhaps due to their more extensive engagement with the process. The ability to reconstruct following NRA guidelines (46%) and the ease of getting relief (26%) were mentioned most frequently as the most positive aspects of the reconstruction process by those in severely hit districts.

Table 10.3: Positive aspects of the reconstruction process – by district impact, district, and rural/urban (IRM-5, weighted, base= 5,857)

	Nothing positive to say about the reconstruction process	Could build houses according to NRA standards	Easy to receive relief	Increase in social cohesion	Could build houses under supervision of engineers)	Proepr monitoring of reconstruction	Don't know/can't say
Overall	***30%***	***27%***	***14%***	***9%***	***9%***	***5%***	***6%***
Severely Hit	**9%**	**46%**	**26%**	**4%**	**12%**	**3%**	**1%**
Dhading	12%	55%	18%	4%	8%	0%	3%
Gorkha	13%	51%	11%	4%	16%	4%	1%
Nuwakot	2%	35%	55%	2%	3%	3%	0%
Ramechhap	10%	36%	14%	6%	30%	4%	1%
Sindhupalchowk	6%	46%	30%	3%	9%	2%	2%
Crisis Hit	**44%**	**14%**	**9%**	**11%**	**9%**	**6%**	**7%**
Bhaktapur	23%	13%	22%	5%	15%	10%	11%
Kathmandu	49%	12%	6%	12%	8%	6%	7%
Okhaldhunga	18%	41%	16%	3%	9%	5%	9%
Hit with heavy losses	**22%**	**47%**	**8%**	**7%**	**2%**	**8%**	**7%**
Lamjung	23%	52%	3%	6%	2%	10%	4%
Solukhumbu	20%	37%	18%	8%	2%	3%	12%
Hit	**27%**	**28%**	**2%**	**24%**	**2%**	**7%**	**10%**
Syangja	27%	28%	2%	24%	2%	7%	10%
Rural Area	22%	37%	17%	7%	9%	4%	4%
Urban Area	46%	9%	8%	14%	8%	7%	8%

10.3 Future outlook

Overall direction of the country

When asked about the overall direction of the country, just over half of respondents (52%) said that things in Nepal were moving in the right direction, and four in ten (43%) said it was going in the wrong direction.

Looking at optimism levels across differently impacted areas, those in severely hit districts were most likely to be optimistic (79%), followed by those in districts hit with heavy losses (71%), and hit districts (70%). Only three in ten (31%) in the crisis-hit districts were optimistic about the country's direction – but this is a reflection of the fact that two of the three crisis-hit districts sampled were more urban and in the Kathmandu valley. The two largely urban districts of Kathmandu (29%) and Bhaktapur (24%) were least optimistic about the country's direction; while in Okhaldhunga, another crisis-hit district, optimism levels were high, just like in other higher impact districts (76%).

Opinions about the direction of the country varied widely between urban and rural areas. While 63 percent of those in rural areas said the country was headed in the right direction, 64 percent of those in the urban areas said the country was going in the wrong direction.

The country outlook was similar among men and women. Younger people were more optimistic: The 18-25 age group was the most optimistic (64%), although about half in other age groups also expressed optimism. Lastly, optimism rates declined with higher incomes and also with higher education levels.

Table 10.4: Conditions at the national level – by district impact, district, and rural/urban (IRM-5, weighted, base=5,857)

	Improving	Getting worse	Don't know
	%	%	%
Overall	***52***	***47***	***5***
Severely Hit	**79**	**15**	**6**
Dhading	80	11	8
Gorkha	69	20	11
Nuwakot	90	10	0
Ramechhap	82	16	2
Sindhupalchowk	76	20	4
Crisis Hit	**31**	**65**	**3**
Bhaktapur	24	70	6
Kathmandu	29	68	2
Okhaldhunga	76	18	6
Hit with heavy losses	**71**	**23**	**5**
Lamjung	66	32	2
Solukhumbu	80	8	12
Hit	**71**	**14**	**13**
Syangja	71	14	13
Rural Area	63	32	5
Urban Area	31	64	4

Future outlook for own locality

Respondents from IRM-5 (September-November 2019) were also asked to assess conditions in the place they live and work. Nearly seven in ten (69%) said that conditions in their locality were improving, and about three in ten (28%) said conditions were getting worse. Overall, people were more optimistic about their own localities (69%) than the country as a whole (52%)[2].

Respondents in Kathmandu (49%) were the least optimistic about conditions in their localities. The level of optimism about local conditions was very high among residents of Nuwakot (93%), Ramechhap (92%), Lamjung (89%), and Dhading (88%) districts. Compared to residents of urban areas (51%), residents of rural areas (78%) were more likely to believe that there have been improvements in their local conditions.

A significant majority of younger people (ages 18-25) said conditions in their localities were improving (83%). About seven in ten men (70%) and women (68%) shared the same view. Once again, optimism about local conditions declined with increasing income and education levels.

Table 10.5: Conditions at the local level – by district impact, district, and rural/urban (IRM-5, weighted, base=5,857)

	Improving	Getting worse	Don't know
	%	%	%
Overall	***69***	***28%***	***3%***
Severely Hit	**88**	**9%**	**3%**
Dhading	88	8%	4%
Gorkha	84%	11%	5%
Nuwakot	93%	7%	0%
Ramechhap	92%	7%	2%
Sindhupalchowk	85%	14%	1%
Crisis Hit	**54%**	**44%**	**2%**
Bhaktapur	71%	27%	2%
Kathmandu	49%	49%	2%
Okhaldhunga	85%	12%	3%
Hit with heavy losses	**85%**	**10%**	**4%**
Lamjung	89%	11%	0%
Solukhumbu	79%	9%	11%
Hit	**78%**	**15%**	**6%**
Syangja	78%	15%	6%
Rural Area	78%	19%	3%
Urban Area	51%	46%	3%

2 The Survey of Nepali People (SNP) conducted by The Asia Foundation in late 2018 also looked at optimism at the national and local levels. Compared to nationwide results, optimism about the direction of the country was the same in earthquake affected areas (52% in both surveys). When it came to local conditions, optimism was slightly higher in IRM-5 (63% SNP, 68% IRM-5).

Annex A
Methodology

While the report draws primarily on the recent IRM-5 (Sept-Oct 2019) survey dataset, it also uses datasets from previous survey rounds to assess changes over time. The first IRM survey, IRM-1, was conducted in June 2015 and included 2,980 respondents from 14 districts. The second IRM survey, IRM-2, was conducted in 11 of the 14 districts during February-March 2016 and had a sample size of 4,850 respondents. [1] The same 11 districts were covered in the third, fourth, and fifth IRM surveys. The third survey, IRM-3, was conducted in September 2016 with a total of 4,855 respondents, the fourth survey, IRM-4, was conducted in April 2017 with 4,854 respondents, and the fifth IRM survey, IRM-5, was conducted in September-October 2019 with a total sample of 5,857 respondents.

In IRM-5, an additional sample of 1,000 respondents was allocated as a booster[2] sample to examine issues and the present scenario with regards to retrofitting. This additional sample was added in two rural municipalities (Champadevi Rural Municipality of Okhaldhunga district, and Jwalamukhi Rural Municipality of Dhading district) and two urban municipalities (Kathmandu Metropolitan of Kathmandu district, and Bhaktapur Municipality of Bhaktapur district).

All respondents were asked the questions in-person and all interviews were conducted in Nepali. The interviews in IRM-5 were undertaken through Android tablets, while other surveys in the IRM series were undertaken through hard copy forms. As much as possible, the interviews took place in the respondents' homes.

Findings from survey results are based on weighted data.

Sampling frame and district selection

Households for IRM-5 were selected from the same 11 districts as previous rounds of IRM surveys. To the extent possible, the same respondents who were interviewed in preceding survey were also interviewed in IRM-5. Respondents were selected from 345 wards in the 11 districts.[3] In most cases, when making comparisons across the five surveys, results were based on full surveys in 11 districts, using weights described below.

1 The 11 districts in the last four IRM rounds do not include the three least affected districts that were included in IRM-1. For a summary of the construction of the earlier surveys, see Annex A in: The Asia Foundation (2015). Aid and Recovery in Post-Earthquake Nepal: Independent Impacts and Recovery Monitoring Nepal Phase 1 – Quantitative Survey: June 2015; The Asia Foundation (2016). Aid and Recovery in Post-Earthquake Nepal: Independent Impacts and Recovery Monitoring Nepal Phase 2 – Quantitative Survey: February and March 2016; and The Asia Foundation (2017). Aid and Recovery in Post-Earthquake Nepal: Independent Impacts and Recovery Monitoring Nepal Phase 3 – Quantitative Survey: September 2016; Aid and Recovery in Post-Earthquake Nepal: Independent Impacts and Recovery Monitoring Nepal Phase 4 – Quantitative Survey: April 2017.

2 While designing the sample, the main sample has been further supplemented by booster samples in certain rural/urban municipalities of Kathmandu, Bhaktapur, Dhading, and Okhaldhunga. Although the sampling design for the booster sample is purposive in nature, the processes of selecting the households and respondents are common to both – the main sample and the booster. For the booster sample, The Asia Foundation provided IDA the list of sample clusters of the concerned Palikas in Okhaldhunga and Dhading where the retrofitting activities are very likely to take place. Similarly, the clusters of Kathmandu and Bhaktapur districts where a large number of households were damaged by the earthquake have also been added to the booster sample.

3 Manang, Khotang and Dang were included in IRM-1 but were dropped from the sample because they did not appear in the PDNA's list of affected districts.

Table A.1 lists the impact categories, districts, and the basic sample sizes used in IRM-5. The margin of error at the aggregate level is +/- 1.3% at a 95 percent confidence level. The sample size and margin of error at 95 percent confidence level for each district are presented in table below.

Table A.1: Distribution of sample by impact districts

	Sample size	Margin of error (+/- %)	Number of sample wards
Total	***5,857***	***1.3***	***345***
Severely hit	**2,833**	**1.8**	**180**
Dhading	681	3.8	41
Gorkha	600	4.0	40
Nuwakot	350	5.2	22
Ramechhap	600	4.0	38
Sindhupalchowk	602	4.0	39
Crisis hit	**1,972**	**2.2**	**99**
Bhaktapur	612	3.9	22
Kathmandu	502	4.4	22
Okhaldhunga	858	3.3	55
Hit with heavy losses	**701**	**3.7**	**44**
Solukhumbu	350	5.2	22
Lamjung	351	5.2	22
Hit	**351**	**5.2**	**22**
Syangja	351	5.2	22

Selection of wards within districts

Fourteen districts were sampled in IRM-1 from the population of 26 districts that were affected by the earthquake. In subsequent IRM rounds, the team further narrowed the sample from 14 to 11 of these 26 districts. The survey adopted a multi-stage probability sampling design for the selection of sample districts. The selection was based on stratified random sampling based on four impact categories, as shown in Table A.1. In each of these districts, probability proportional to size sampling (PPS) was adopted to select sample wards. In total, 238 sample wards were selected from the 11 districts. Households for IRM-1 and IRM-2 were chosen from these 238 wards. In addition to these 238 wards, the sample sizes were boosted in four districts where food insecurity was higher than average, bringing the total number of wards to 308 for IRM-2, IRM-3, and IRM-4. Again, in addition to these 308 wards, the sample sizes were boosted in four districts where retrofitting was more common compared to other areas, bringing the total number of wards to 345 for IRM-5. Distribution of wards in each district for the IRM-5 survey is shown in Table A.1. On average, each sampled ward had 16 sampled households from one tole/village (with the exception of Kathmandu and Bhaktapur, where there were 23 and 28 households per ward, respectively).

Selection of enumeration areas within wards

Within the sampled wards, there are numerous clusters of settlements. For sampling purposes, such settlements are referred to as enumeration areas (EA), which could be tole or villages (gaon). The various EAs within a ward were identified and listed once the survey team reached the locality. From this list, each EA was randomly selected using simple random sampling. On average, 16 interviews were conducted in each EA within these new wards.

For 3,554 of the sampled households, the same EAs that were sampled during IRM-2 were visited in IRM-3, IRM-4, and IRM-5. The number of interviews per EA, however, has increased since IRM-1, from 10 households per in EA to 16 households per EA in IRM-2, IRM-3, IRM-4, and IRM-5.

The same procedure which was used in IRM-1 was also used for the selection of an additional 1,000 respondents in IRM-5 for the extra sampled wards (in the four districts where retrofitting was prioritized).

Selection of households within EAs

To the extent possible, the same households which had been surveyed in previous IRM surveys were identified for interviews in IRM-5. The remaining households in each EA who had not been interviewed earlier were selected using the same protocols as in the earlier survey. Households were randomly selected using the household lists generated for each EA during IRM-1, IRM-2, IRM-3, and IRM-4.

The table below summarizes the attrition rate in different rounds of IRM survey.

Table A.2: Attrition rate of IRM surveys

Surveys	June 2015 IRM-1	Feb/March 2016 IRM-2	Aug/Sep 2016 IRM-3	April 2017 IRM-4	Sep/Oct 2019 IRM-5
Total Sample size (without IRM-5 booster)	***2980***	***4855***	***4855***	***4854***	***4854****
Panel Sample	NA	NA	4446	4131	3554
Longitudinal sample			409	723	1300
Attrition Rate compared to IRM 2 (%)			8.4	14.9	26.8
Attrition Rate compared to Previous IRM (%)			8.4	7.1	13.9

*Total follow-up sample size in IRM-5 without booster sample.

The attrition rate was 13.9 percent in IRM-5 compared to IRM-4. In other words, 86.1 percent of the same households which had been surveyed in IRM–4 were also surveyed in IRM-5.

Selection of respondents within households

Wherever possible, the same respondents who had been surveyed in IRM-4 were selected for IRM-5. The IRM-4 survey team obtained the names and mobile phone numbers of interviewees. This was used to identify the respondent in each household to be interviewed for subsequent surveys.

Once a household was selected for the interview, the next task was to select the respondent from within the household. A well-informed individual who played some role in household decision-making was selected and interviewed. Within a household, respondents were randomly chosen from among the decision-making individuals, with steps taken to ensure a gender balance.

Weighting data

IRM-1 results were based on weighted estimates. Results in IRM-2 were based on unweighted sample means. For IRM-3, weighted results were used for all three full datasets, and unweighted results were used for household panel datasets. Also, in IRM-4, weighted results were used for all four full datasets, and unweighted results were used for household panels. For IRM-5, weighted results were used for all five full datasets.

Weights for all four datasets were constructed in three steps. First, the base weight was calculated by taking the ratio of sample and population in each Post-Disaster Needs Assessment (PDNA) impact category or stratum. Second, the base weight in each stratum was adjusted by multiplying by the proportion of the urban and rural population. Finally, the composite weight was calculated by multiplying the adjusted weight with the proportion of district samples. Using the final composite weight helps reduce any over-coverage and under-coverage bias, thus producing more accurate survey estimates of population parameters. For instance, the total population households in Kathmandu are 44.4 percent of the population in 11 districts, but the sample size in the district is only 7.3 percent of the total sample. Using the composite weight, the sample 7.3 percent will reflect the 44.4 percent population. Similarly, the population of Solukhumbu represents 2.4 percent of the population in 11 districts, but 7.2 percent of the total sample, which is adjusted using the final weight. The population parameters come from the Central Bureau of Statistics (CBS), Nepal's 2011 National Population and Housing Census.

Annex B
Demography

Demographic profile of respondents

This section presents the demographic profile of respondents from IRM-1 (June 2015), IRM-2 (Feb-March 2016), IRM-3 (Sep 2016), IRM-4 (April 2017), and IRM-5 (Sep-Oct 2019). The total sample size of IRM-5 was 5,857. The sample sizes for IRM-1, IRM-2, IRM-3 and IRM-4 were 2,380, 4,853, and 4,855 and 4,854, respectively. The tables below show the distribution of age groups, gender, educational status, caste/ethnicity, religion, marital status, and occupation of respondents.

Of the total respondents in IRM-5, there was an equal distribution of male and female respondents, where 48 percent were male and the remaining 52 percent were female. As shown in Table 1, the distribution of gender was more or less consistent across all survey rounds.

Table B.1: Gender of the respondents (%)

	June 2015 (IRM – 1)	Feb-Mar 2016 (IRM – 2)	Sep 2016 (IRM –3)	April 2017 (IRM –4)	Sep-Oct 2019 (IRM – 5)
Female	50.0	50.0	48.2	49.2	51.8
Male	50.0	50.0	51.8	50.8	48.2
Total	100.0	100.0	100.0	100.0	100.0

Similarly, about 5 percent of respondents were between 18 to 25 years old, nearly 17 percent were between 26 to 35 years old, one quarter were between 36 to 45 years old, and slightly more than 50 percent were above 46 years old. The sampled population in IRM-5 has a higher percentage of respondents aged 46 and above, and fewer respondents aged 18-25, or 26-35, compared to previous rounds.

Table B.2: Age group of respondents (%)

	June 2015 (IRM – 1)	Feb-Mar 2016 (IRM – 2)	Sep 2016 (IRM –3)	April 2017 (IRM –4)	Sep-Oct 2019 (IRM – 5)
	%	%	%	%	%
18-25	8.5	8	8.1	8.1	5.1
26-35	20.7	19.4	20.5	19.8	16.8
36-45	22.5	24.1	25.8	25.4	24.3
46 & Above	48.3	48.5	45.6	46.8	53.8
Total	100	100	100	100	100

Among the IRM-5 respondents, one quarter were illiterate and a one in ten were literate without any formal schooling. These numbers remained fairly consistent throughout the surveys. About 17 percent of respondents had received primary education and less than 2 percent reported being university graduates.

Table B.3: Educational status of respondents (%)

	June 2015 (IRM – 1)	Feb-Mar 2016 (IRM – 2)	Sep 2016 (IRM –3)	April 2017 (IRM –4)	Sep-Oct 2019 (IRM – 5)
	%	%	%	%	%
Illiterate	21.4	33.2	23.7	24.8	22.9
Literate	19.5	19.3	22.3	22.7	13.9
Primary Level	11.9	11.5	12.1	11.9	16.8
Lower Secondary Level	9.2	8.8	8.9	10.3	11.8
Secondary Level	5.2	15.2	10.7	9.8	3.8
SLC Pass	13.2	0.3	7.6	8.6	12.9
+2/Intermediate Pass	10.3	7.6	9.4	7.4	10.3
Bachelor Pass	6.6	3.3	3.1	3	6
Master & Above	2.8	0.8	2.2	1.6	1.5
Total	100	100	100	100	100

The caste/ethnic composition of respondents from all surveys was predominantly Hill caste, Hill ethnic, and Newar, which is to be expected in most of the earthquake affected districts. The share of Madhesi respondents was lowest among the distribution of caste/ethnicity in IRM surveys. Otherwise, the distribution of caste/ethnicity was fairly consistent in all survey rounds.

Table B.4: Ethnicity of respondents (%)

	June 2015 (IRM – 1)	Feb-Mar 2016 (IRM – 2)	Sep 2016 (IRM –3)	April 2017 (IRM –4)	Sep-Oct 2019 (IRM – 5)
	%	%	%	%	%
Hill Caste	38.6	34.2	38.9	36.6	37.1
Hill Ethnic	27.5	33.3	31.4	33.1	29.2
Hill Dalit	4.9	5.9	5.5	5.7	5
Newar	27.8	25.4	22.2	22.1	26.8
Madhesi Caste	0.4	0.3	0.5	0.7	0.6
Madhesi Ethnic	0.4	0.8	1.2	1.3	1.1
Madhesi Dalit	0	0	0.1	0	0.2
Muslim	0.3	0.1	0.2	0.4	0
Total	100	100	100	100	100

The religious breakdown of the survey sample closely matches the actual religious composition of the overall population. See table below for more details. In IRM-5 , Hindu respondents constituted 82.2 percent of the sample, and Buddhist respondents made up 15.4 percent of the sample. Similarly, Muslims were 0.3 percent, Christians were 1.4 percent, and Kirat were 0.6 percent of the sample. In the sample of all five waves, Hindu respondents were slightly over-represented and Buddhists were under-represented, compared to the national figures as specified in the 2011 census.

Table B.5: Religion of respondents (%)

	June 2015 (IRM – 1)	Feb-Mar 2016 (IRM – 2)	Sep 2016 (IRM –3)	April 2017 (IRM –4)	Sep-Oct 2019 (IRM – 5)
	%	%	%	%	%
Hindu	83.2	80.8	80.5	79.9	82.2
Buddhist	13.8	16.7	16.6	16.9	15.4
Muslim	0	0.1	0.2	0.3	0.3
Christian	1.3	1.3	1.3	1.5	1.4
Kirat	1.6	1.1	1.1	1.4	0.6
Atheist	0.1	0.1	0.2	0	0
Total	100	100	100	100	100

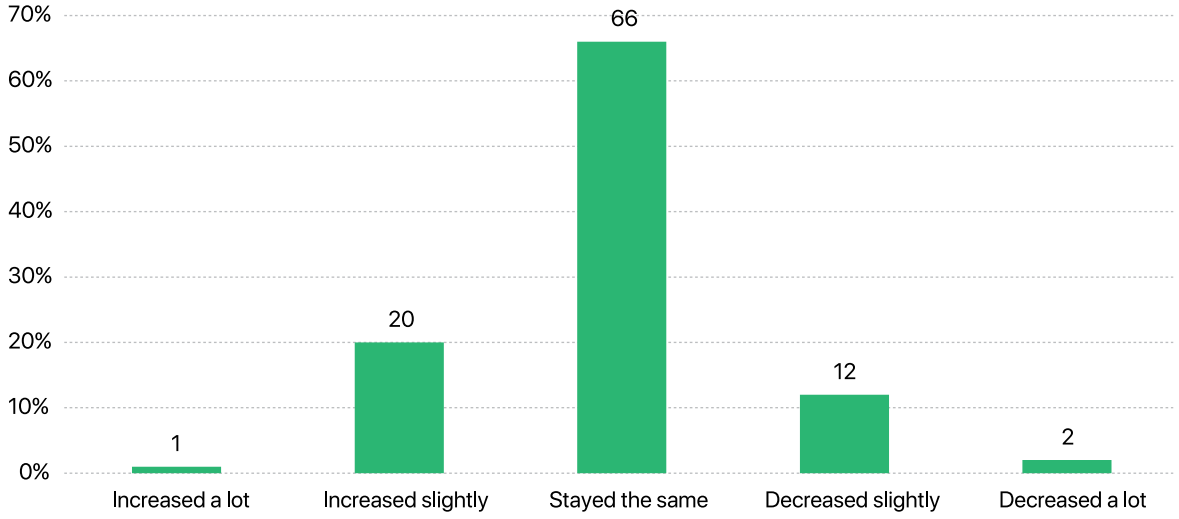
The disaggregation of the sample by respondents' marital status is presented in the table below. In the sample, an overwhelming majority (86%) of respondents were married, and around 6 percent were unmarried. The proportion of windows/widowers in the sample was 8 percent. There was a similar pattern in these proportions throughout all survey rounds (Table B.6).

Table B.6: Marital status of respondents (%)

	June 2015 (IRM – 1)	Feb-Mar 2016 (IRM – 2)	Sep 2016 (IRM –3)	April 2017 (IRM –4)	Sep-Oct 2019 (IRM – 5)
	%	%	%	%	%
Married	87.9	89.1	87.8	87.6	86.1
Unmarried	6.4	4.1	5.6	4.9	5.5
Widow/widower	5.4	6.1	5.9	6.8	7.6
Divorced	0	0.1	0.2	0.1	0.1
Separated	0.2	0.6	0.6	0.6	0.6
Total	100	100	100	100	100

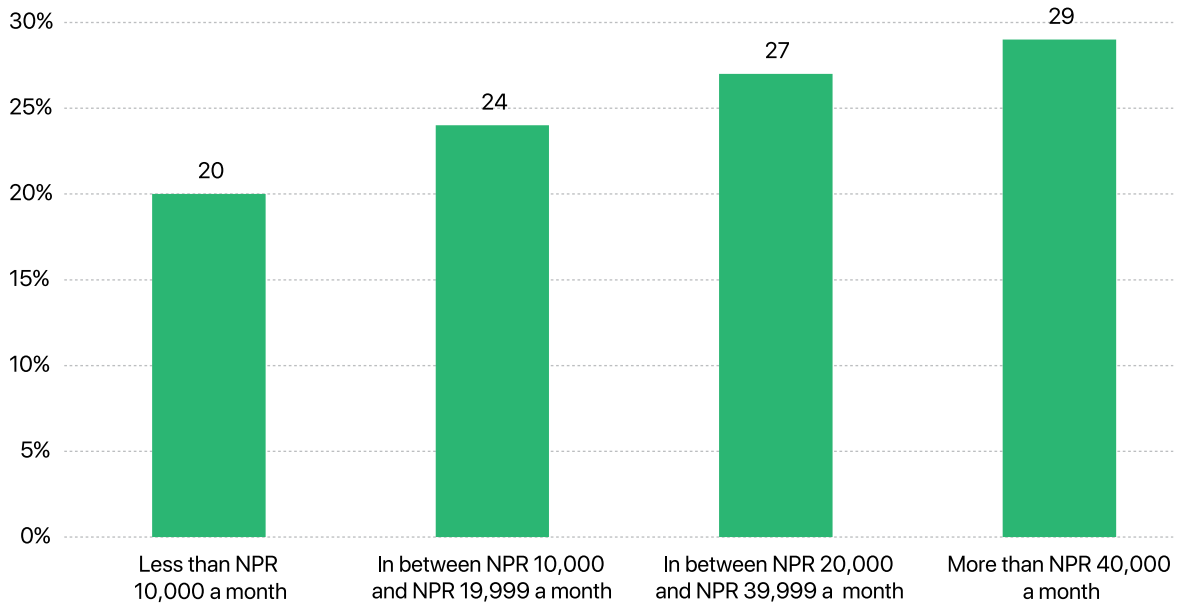
Respondents in IRM-5 were asked to compare their monthly income before and after the earthquake. Most people said their monthly income had remained the same, while around two in ten said it had increased, and 14 percent reported a decrease (Figure B.1).

Figure B.1: Status of monthly income (%)



More than one quarter of respondents (29%) said that their household income was more than NPR. 40,000 (USD 341) per month during the last month. The second highest proportion of respondents (27%) mentioned that their income bracket was NPR. 20,001 to 39,999 (USD 171- 341) per month. Around one quarter of respondents said their monthly income was NPR. 10,000 to 19,999 (USD 85 - 171). The share of respondents who mentioned that their monthly income was less than NPR. 10,000 (USD 85) was around 20 percent.

Figure B.2: Income of respondents (%)



Almost half of respondents (43%) reported agriculture as their main occupation. About one quarter said their occupation was in industry/business, and 12 percent said they were housemakers. Another 7 percent were in service, 5 percent in labor, and 3 percent said they were unemployed and retired.

Table B.7: Occupation of respondents (%)

	Jun-15 (IRM – 1)	Feb-16 (IRM –2)	Aug-Sep 2016 (IRM –3)	Apr-17 (IRM –4)	Sep-Oct 2019 (IRM –5)
	%	%	%	%	%
Agriculture	42.4	55.6	44.6	43.8	42.8
Business	26	18.6	29.7	28.8	25.3
Service	7.7	4.8	5.4	5.3	7.2
Labor	3.7	4.2	4.2	6.4	4.5
Student	2.3	1.4	1.5	1.5	1.5
Housewife/husband	12.3	11.5	9.8	10	11.7
Retired	3.6	2.5	2.4	2.1	2.7
Unemployed	2.1	1.6	2.3	2.1	3.2
Total	100	100	100	100	100

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