

# Aid and Recovery in Post-Earthquake Nepal

Independent Impacts and Recovery Monitoring Phase Five Qualitative Field Monitoring: November 2019









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Independent Impacts and Recovery Monitoring Phase Five **Qualitative Field Monitoring: November 2019** 

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# **Preface**

The publishing of this report marks the fiveyear 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 pur-

poses 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 report identifies remaining challenges and opportunities for ongoing earthquake recovery, as well as future disaster responses – with a particular focus on the governance of 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 earth-quake 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

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The research was conducted by a team of DRCN researchers: Prawin Adhikari, Kiran Bhattarai, Aruna Limbu, Pallavi Payal, Manasi Prasai, Dewan Rai, Daya Raj Subedi, and Indu Tharu. Nayan Pokhrel and Sapana Sanjeevani coordinated the field research, with support from Venisha Udas and Smriti Rai. Anubhav Ajeet, Nayan Pokharel and Ishwari Bhattarai assisted in preparing the research formats, researcher trainings, and oversight of field data collection.

Analysis and writing was done by Amish Raj Mulmi, Pranab Man Singh, Prawin Adhikari, and Nayan Pokhrel who co-authored the report with Lena Michaels. Carolyn O'Donnell, Srijana Nepal, Charlotte Ramble, and Iona Liddell have provided valuable feedback and inputs at various stages of the research. Kimberly Keeton has edited the report.

Lena Michaels directed the IRM project 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. During the same period, Lena Michaels coordinated the project and led the qualitative research component.

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**

The Independent Impacts and Recovery Monitoring (IRM) project is a longitudinal mixed-methods study that was initiated immediately after the April-May 2015 earthquakes in Nepal to systematically monitor patterns of recovery and evolving needs over the longer term. This report, produced by Democracy Resource Center Nepal and The Asia Foundation, shares findings and analysis from the fifth round of qualitative monitoring conducted in November 2019, in four earthquake-affected districts. The findings presented in this report focus on housing recovery-including individuals or groups that have fallen behind in order to inform the remaining recovery efforts, continue to make disaster response effective and accountable, and feed into preparedness planning for future disasters.

## **Progress in housing recovery**

This research observed much progress in reconstruction, with many new houses rebuilt, while progress in retrofitting remained slow. Progress differed between districts, municipalities, and settlements for multiple reasons, including geography and accessibility, the need for housing, access to markets, the costs of rebuilding, and access to assistance and financial resources. Generally, progress was faster in rural areas than in urban ones.

People generally preferred constructing modern concrete houses, replacing older building techniques and designs, and changing the look of settlements. Fewer built stone and mud houses, and those who built more traditional houses mostly did so because they are cheaper and can be built quickly, with local materials. The majority were satisfied with their new houses because they perceived them to be safer, but many complained about their small size and planned to expand them in the future.

People usually built on land they owned prior to the earthquakes—with the exception of those who were displaced. In some areas, people preferred to rebuild on land closer to roads or bazaar areas. Access to water sources also influenced how and where people rebuilt.

The newly-built "earthquake houses" tended to be smaller than pre-earthquake houses, especially in rural areas. For this reason, houses that were partially damaged during the earthquakes continued to be widely used, raising questions about long-term building safety. Some partially damaged houses were used for storage of goods or livestock, while others still lived in them, especially in urban areas. Temporary structures were also still used alongside rebuilt houses; for storage, livestock, and living space.

The repair of old houses generally happened alongside the building of new ones, and most people did the repairs themselves, without technical supervision. The most common repairs were removing upper floors and covering cracks, not structural retrofitting. Very few did the latter, but people often referred to repairs as "retrofits," as distinction between retrofitting technicalities was not well understood.

#### **Urban reconstruction**

Urban reconstruction lagged behind rural reconstruction for complex reasons. Land plots are smaller, but people tend to build bigger houses and construction is more expensive in urban areas. Many houses were partially damaged but demolishing and rebuilding was more difficult due to adjoining buildings and narrow alleyways. Alternative housing options, such as renting or second houses, were more available for people in urban areas. Further, landownership patterns, land disputes, and specific rules leading to higher costs for rebuilding in heri-

tage areas, also prevented many in urban areas from successfully rebuilding. Despite challenges specific to urban areas, little had been done by late-2019 to address these at the local level and support urban housing recovery.

The urban poor were most affected by the difficulties and high costs of rebuilding in urban areas. Many continued to live in vulnerable conditions, such as in badly damaged houses or temporary shelters.

## **Temporary shelters**

The shares of people still in temporary shelters noticeably decreased between 2017 and 2019, primarily due to progress in housing reconstruction. However, in all municipalities visited, there were still several earthquake-affected people living in shelters consisting of temporary housing structures made from salvaged tin and wood, or bamboo.

Most of those still living in shelters seemed to be stuck either due to lack resources to finance rebuilding, or land to build on. They were primarily from marginalized and vulnerable groups, many of them elder single women or people without land documents, and from communities displaced by the earthquakes.

## **Displacement**

Since 2017, more displaced households have resettled on new land, with government or non-governmental support, or returned to their original land to rebuild there, despite concerns about the safety of the land. This was because some earthquake-affected households preferred staying on unsafe land over resettling elsewhere, while others lacked access to alternatives.

Several displaced communities had yet to find permanent solutions and displaced households were generally slower to rebuild. In all areas visited, several displaced families and individuals remained in temporary shelters, sometimes on unsafe land, unable to rebuild as they waited for their resettlement to be resolved.

## **Costs of rebuilding**

The average costs of rebuilding houses far exceeded the amounts of the housing reconstruction grants. In urban areas, reconstruction costs were higher than in rural areas, despite better accessibility. This is due to the type of houses built, higher costs of building in heritage areas, and high demolition costs.

People in remote areas paid a significant share of overall rebuilding costs towards transportation. This is due to difficulties transporting materials to areas without roads or without all-year road access. The cost of purchasing construction materials fluctuates seasonally because of monsoon damage to roads.

Since the earthquakes, prices for construction materials and labor have fluctuated, depending on supply and demand. In many areas, costs decreased in late 2019 compared to early 2017. However, costs for certain local resources increased since the 2017 local elections, due to increased local controls and taxes. Overall, the demand for construction materials increased since the earthquakes, with local sellers reporting significantly higher sales.

## **Housing grants**

Access to housing grants improved, largely due to better information, faster distribution of grant installments, and increased presence of bank branches at the local level. Local governments also helped ease access with local representatives acting as an important bridge between the National Reconstruction Authority (NRA) and beneficiaries. Filing grievances also became easier for people, and there was progress addressing grievances through reassessments. Yet, communities and local governments thought the grievance process lacked transparency and many were still unsure about the outcome of their complaint.

Some genuine earthquake survivors remained excluded from housing grant beneficiary lists. Wrongful exclusion was often due to mistakes in initial assessments, technical glitches, and lack of land or citizenship documentation. Respondents expressed frustration about this, as did local government representatives, who were unable to help beyond registering grievance cases. Researchers also heard some complaints about the "inflation of beneficiary lists" and wrongful inclusion.

Information sources on the housing grants diversified—with radio, engineers, and local government officials emerging as key information sources—and awareness of grant requirements and processes improved, but gaps remained. Information-sharing on retrofitting, approved building designs, and access to low-interest loans remained inadequate.

Generally, people were grateful for the assistance provided through the housing grant scheme but remained dissatisfied with the grant amounts. Given high rebuilding costs, overall grant amounts were considered insufficient to help people financially recover from the impacts of the earthquakes. The retrofitting grant, in particular, was seen as inadequate. Many complained about the division of grants into multiple installments, each insufficient to cover expenses necessary to qualify for the next installment.

#### **Technical assistance**

Access to technical assistance improved. The increased presence of engineers in municipalities and ward offices was generally seen to have improved access to technical information and supervision, yet, some earlier challenges persisted. Appointed engineers still changed frequently in some places, access remained more difficult in very remote areas, and the quality of assistance provided was often inadequate and focused mostly on processing housing grants. Technical guidance on retrofitting and what types of houses could be built with the grant was limited.

# Special support for vulnerable, displaced, and landless households

Additional "top-up" grants for vulnerable groups were not widely available in November 2019, but non-governmental actors provided aid to vulnerable households in some areas. Knowledge of additional grants for vulnerable households, and understanding of the NRA's categories of vulnerable groups, was limited at the local level. Local governments rarely initiated action to support vulnerable groups, but they were able to point to those struggling to recover, and often expressed concerns about poor vulnerable households that do not fit the NRA's criteria.

Special support and grants available for displaced and landless households were implemented and local stakeholders were aware of these in areas visited, in contrast to the vulnerable group top-up grants. Several households had received special support under these schemes, but many did not—despite qualifying. As with vulnerability, local governments were not found to have devised their own strategies for displaced communities, nor to haved pushed their agendas, largely due to the definition of their roles and decision-making authority remaining with the NRA.

### **Roles of local governments**

Local governments contributed to the reconstruction process by assisting the implementation of government schemes. Local governments helped people file grievances; supported verification of complaints; facilitated access to engineers; managed and forwarded data; and shared information on central-level decisions, new policies, and changes to procedures. Local governments had facilitating roles rather than implementing and decision-making ones. Their roles had not changed since they had become involved in reconstruction in late 2018 and early 2019.

Governance of the reconstruction process remained centralized, even after the devolution of certain responsibilities to local governments. Local representatives and government officers commonly complained that all important decision-making and implementing powers remained with the NRA and that the roles given to local governments were limited and subordinate. District-level stakeholders also thought their roles were limited and reduced to forwarding policy decisions. The involvement of local political leaders and civil society actors in the reconstruction process was minimal in 2019.

#### Coordination

Coordination improved, but communication gaps persisted. Communities thought the presence of elected representatives improved coordination and information dissemination at the municipality and ward levels. Local governments, however, said that coordination between local and central levels remained one-sided and slow, making it difficult for them to do their work effectively. They expressed that changes to NRA policies were not communicated to them in a timely and clear manner, and that they were not adequately consulted in the process.

Data management was also problematic in some areas. Despite improvements to data recording and management after standardizing formats and expanding access to computers, local government representatives and engineers often highlighted that data management was challenging. This was due to a lack of equipment, inconsistencies in data records due to slow or non-existent handover, technical errors, and limited information-sharing. Data was often recorded manually and entered data was not necessarily verified, raising questions about data safety.

## **Coping strategies**

**Borrowing:** Most earthquake-affected households covered rebuilding costs by taking out loans. As reconstruction costs were high and generally exceeded grant amounts, and access to government-subsidized low-interest "soft loans" was extremely limited, borrowing was an extremely common coping mechanism. Both borrowing and debts increased over time. In rural areas, borrowing was more common, but people borrowed comparatively smaller, though still significant, amounts at high interest rates from local cooperatives, moneylenders, and microfinance institutions. In urban areas, fewer people took out loans, but the loans were larger and usually taken from formal sources of lending at lower interest rates. People in rural areas struggled more to pay back debts.

Microfinance institutions became a prominent source of lending, mostly targeting rural women, but relying on exploitative practices to create revenue. Many people who had borrowed from microfinance groups complained about coercive rules and high interest rates. Some had to take on multiple loans, paying interest to one microfinance group with a loan from another.

Cooperatives, on the other hand, sometimes provided "home loans" at lower interest rates, trying to help members rebuild and recover. As in previous years, very few people borrowed from banks for reconstruction purposes. Those who did take bank loans often did so for purposes other than reconstruction but used some of the loan to rebuild their house.

**Debt:** Many earthquake-affected households were stuck in cycles of debt and borrowing, especially those from poor and marginalized Dalit and indigenous communities. Many people still hoped to receive subsidized loans from the government to help them repay loans. In the meantime, most were un-

sure how to repay loans and said they would have to rely on employment overseas. The sale of land as a coping strategy became more common, especially in urban areas and bazaar towns.

#### Livelihoods

Livelihoods had mostly recovered to pre-earthquake levels, and few said their livelihoods still suffered due to the direct impacts of the earthquakes. Indirectly, however, the earthquakes continued to have an impact, as they increased people's need to earn larger amounts. Reconstruction requires large sums of cash, which rural subsistence farmers and other groups with low incomes do not have. These groups have long struggled to earn a living and the impacts of the earthquakes made it even harder for many of them. For this reason, livelihood support and income generating schemes remained a key need for earthquake-affected households.

Rural economies are increasingly moving away from agriculture. As a result, roads, financial services, and cash incomes have become more important for rural households who face difficulties farming their land, as well as storing agricultural produce and equipment in smaller houses. More people from farming communities sought foreign employment as an alternative livelihood option. This, combined with other impacts on livelihoods due to decreasing land plots and farmland, climate change, and migration patterns or resettlement, pose longterm challenges for livelihood recovery and income stability in Nepal.

With increases in borrowing and debt levels, and the impacts of the COVID-19 crisis in 2020, it remains important to track whether and how people are able to generate sufficient and stable incomes from their livelihoods, and to provide continued support to those who are struggling.

# List of Acronyms

BCM Brick and cement mortar

CBS Central Bureau of Statistics

CGA Cash grant agreements

CGI Corrugated galvanized iron

**CLPIU** Central Level Project Implementation Unit

DCC District Coordination Committee

DDRC District Disaster Relief Committee

**DFID**UK Department for International Development **DLPIU**District Level Project Implementation Unit

**DoA** Department of Archaeology

**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

MoFALD Ministry of Federal Affairs and Local Development

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
RCC Reinforced cement and concrete

**RHRP** Rural Housing Reconstruction Program

**SDC** Swiss Agency for Development and Cooperation

SMM Stone and mud mortar
TA Technical Assistance
UK United Kingdom

**VDC** Village Development Committee

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Photo: Prabhar R Jha

## Focus of IRM research and this report

The Independent Impacts and Recovery Monitoring project (IRM) project was initiated immediately after the April 25 and May 12, 2015 earthquakes in Nepal. IRM is a longitudinal mixed-methods study developed to systematically monitor patterns of recovery and evolving needs over the longer term. This report, produced by Democracy Resource Center Nepal and The Asia Foundation, provides findings and analysis from the fifth round of IRM qualitative monitoring conducted in November 2019.

The report is based on in-depth field research conducted in four earthquake-affected districts: Gorkha, Sindhupalchok, Okhaldhunga and Bhaktapur. In each of these districts, two local units and two wards within each of them were sampled. Researchers used key informant interviews, focus group discussions, citizen interviews, and direct observation to collect qualitative data on housing recovery in each of these

districts. In total, 330 people were interviewed for this research.

The report focuses on housing recovery and presents analysis on how different factors impact households' or communities' ability to rebuild or repair their houses, and which individuals or groups have fallen behind. The analyses examine changes that have occurred over time, comparing data and findings with those from previous rounds of research. Recommendations are focused on policy and governance changes that could help improve ongoing recovery as well as future disaster responses in Nepal.

The aims of the research are to inform the remaining recovery efforts, continue to make the disaster response effective and accountable, and feed into preparedness planning for future disasters. This qualitative report is produced alongside a separate, quantitative report based on the large-scale IRM household panel survey.

# 1.1 The Independent Impact and Recovery Monitoring Project

The Independent Impacts and Recovery Monitoring project (IRM) project was initiated immediately after the April 25 and May 12, 2015 earthquakes in Nepal that killed nearly 9,000 people and destroyed over half a million houses.

IRM is a longitudinal mixed-methods study developed to systematically monitor social impacts of the disaster and the response over the longer-term, collecting evidence that goes beyond one-off damage and needs assessments. By monitoring patterns of recovery and evolving needs, IRM contributes to making the disaster response more effective and accountable.

The first round of research took place less than two months after the earthquake hit, with three subsequent rounds conducted at roughly six-month intervals between 2015 and 2017. The fifth round was conducted in late 2019, a few months before the disaster's five-year anniversary in 2020. The specific IRM research rounds are as follows:

- IRM-1 (June 2015)
- IRM-2 (February-March 2016)
- IRM-3 (September 2016)
- IRM-4 (April 2017)
- IRM-5 (September-November 2019)

Each of these research rounds used mixed methods: Through qualitative fieldwork conducted in a smaller number of locations affected to varying degrees by the earthquake, standardized, in-depth information (including video interview footage) was collected. Locations were selected to ensure variation, but due to the small sample size, the data is not formally representative of the situation across all disaster-affected areas of Nepal. In parallel to the qualitative research, a large-scale household panel survey was conducted, covering a wider population, capturing less in-depth, but broader representative quantitative information on evolving conditions, needs, and perceptions.

The IRM approach has focused on five key areas: (1) aid effectiveness—how much and what types of aid people are getting, needs, and shortfalls; (2) economy and livelihoods—how socioeconomic conditions are evolving at the local level; (3) social relations and violence—the capacity existing for collective action and whether and where violence is emerging; (4) protection and vulnerability—what abuses are occurring and security concerns; and (5) politics and leadership—how the disaster and aid effort are impacting leadership and institutions.

The study findings present a clearer picture of who is recovering, who is not – and the reasons behind these trends, which can both guide the ongoing recovery effort as well as inform future disaster preparedness and emergency responses.

IRM is led by The Asia Foundation (The Foundation) and funded by the UK Department for International Development (DFID) Nepal. Rounds 2-4 of IRM were jointly funded by DFID Nepal and the Swiss Agency for Development and Cooperation (SDC). The research is implemented by The Asia Foundation together with its partners Democracy Resource Center Nepal (DRCN) and Interdisciplinary Analysts (IDA).

<sup>1</sup> https://asiafoundation.org/where-we-work/nepal/irm-project/



- 1. A damaged house in Sindhupalchok, 2015. Photo: Prabhat R Jha
- 2. Housing damages in 2015. Photo: Prabhat R Jha
- 3. A damaged house in an urban area, Kathmandu, 2015. Photo: Prabhat R Jha
- 4. An excavator removing debris of Sundhara tower which fell during the earthquake, 2015. Photo: Prabhat R Jha

# 1.2 Focus of this report

This report is based on the fifth round (IRM-5) of qualitative field monitoring of the IRM project conducted in November 2019 by Democracy Resource Center Nepal (DRCN). The report is produced by Democracy Resource Center Nepal (DRCN), with technical assistance from The Asia Foundation.

The research was conducted after a two-and-a-halfyear gap in field monitoring (the last round was completed in April 2017) with the aim of assessing the situation nearly five years after the earthquakes. Given this gap, the focus of the research was adjusted to capture the overall progress made in reconstruction and recovery, as well as to identify remaining gaps and challenges.

The report focuses on local experiences of housing recovery – unlike in previous IRM studies, which looked at impacts and recovery around five thematic areas, not just housing recovery. The report pres-

ents analysis on how different factors – geographical, economic, socio-political, governance-related, or individual – impact households' or communities' ability to rebuild or repair their houses, and which individuals or groups have fallen behind. The report presents findings drawn from local level perspectives and experiences of impacts and recovery. It does not present the views of central level or international aid providers, nor does the report look at technical aspects of housing reconstruction. Recommendations are focused on policy and governance changes that could help improve ongoing recovery as well as the management of future disaster responses in Nepal.

Firstly, the report looks at the status of the reconstruction and repair of individual houses, including how people were living, their use of and satisfaction with new houses, and why progress was faster or slower in some places. Secondly, the report pres-

<sup>2</sup> The thematic areas were: aid delivery and effectiveness, economy and livelihoods, social relations and violence, protection and vulnerability, and politics and leadership.

ents costs of reconstruction, access to finance, and the housing grants process. The report also looks at governance, particularly in relation to the emerging roles of local governments. The analyses examine changes that have occurred over time, comparing data and findings with those from previous rounds of research. The research draws on lessons from the first five years of post-earthquake reconstruction. The aims of this study are to inform the remaining recovery efforts, and feed into preparedness planning in view of future disasters. This qualitative report is produced alongside a quantitative report based on a large-scale household survey.<sup>3</sup>



Reconstruction in Sindhupalchok, 2016. Photo: Prabhat R Jha

## 1.3 Methods

The in-depth qualitative field research for this report was conducted between November 15 and December 1, 2019. Four teams of two researchers each visited four earthquake-affected districts: Bhaktapur, Gorkha, Okhaldhunga, and Sindhupalchok. Researchers visited a total of 16 wards in eight local units and also spent time in district headquarters to track broader changes and developments in the dynamics of the reconstruction process for the districts visited.

The research teams used key informant interviews, focus group discussions, citizen interviews, and direct observation to collect qualitative data on housing recovery progress and related needs and vulnerabilities. Researchers spoke to a wide range of respondents, including government officers at district, municipal, and ward levels; non-government aid providers; political party representatives; engineers and technical officers; community groups; civil society representatives and journalists; representatives of finance institutions and banks; and most importantly, earthquake-affected people themselves. In total, researchers spoke to 330 people of which 166 were common citizens (Table 1.1). Of the respondents, 248 were men and 82 women. The analysis of field data was complemented by DRCN's media monitoring and a review of relevant laws and government policies.

The Asia Foundation and Interdisciplinary Analysts (2020). Aid and Recovery in Post-Earthquake Nepal: Independent Impacts and Recovery Monitoring Phase 5 – Quantitative Survey (September-October 2019). Kathmandu: The Asia Foundation

Most of the respondents from government, political parties, civil society, finance institutions, the NRA, and technical offices were men.

Table 1.1: Numbers of respondents

Type of respondent	Numbers interviewed
Common citizen	166
Government official	53
Engineer or technical officer	20
Political party	14
Finance institutions or bank	23
NRA	10
Civil society or journalist	16
NGO/INGO	15
Others	13
Total	330



- 1. Focus Group Discussion in Suryabinayak, Bhaktapur, November 2019. Photo: Pallavi Payal
- 2. Interview in Paslang, Gorkha, November 2019. Photo: Manasi Prasai
- 3. Interview in Suryabinayak, Bhaktapur, November 2019. Photo: Kiran Bhattarai
- 4. Visiting the site of a fully damaged house, Okhaldhunga, November 2019. Photo: Indu Tharu

## **Field locations**

DRCN deployed four teams of two researchers each to conduct research in Gorkha, Sindhupalchok, Okhaldhunga, and Bhaktapur districts. Three of these four districts had also been visited during previous rounds of IRM research (Gorkha, Sindhupalchok, Okhaldhunga). They were again selected to maintain continuity and revisit the same settlements/villages and assess changes over time. The fourth district previously visited (Solukhumbu) was replaced with the more urban Bhaktapur, in order to study variances in

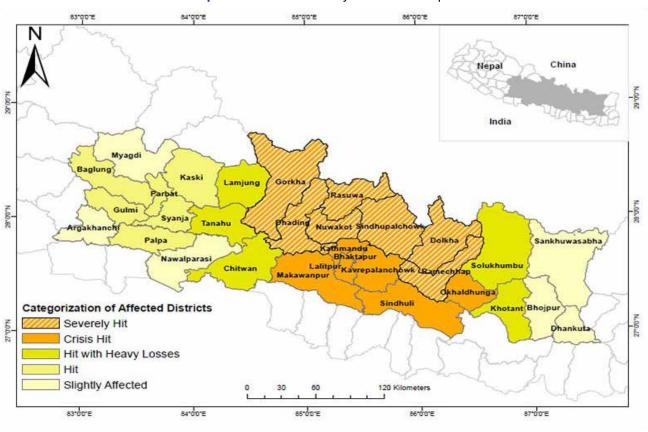
reconstruction rates between rural and urban areas.<sup>5</sup> Of the districts selected, Gorkha and Sindhupalchok were categorized as 'severely hit', and Okhaldhunga and Bhaktapur as 'crisis hit' (Map 1.1).

In each of the chosen districts, two local units and two wards within each of them were sampled. A total of 16 wards in eight local units were included in the research.

Locations in the three previously visited districts remained the same as before. However, after Nepal's restructuring of administrative units at the local level in 2017<sup>6</sup>, previously visited Village Development Committees (VDCs) now fall into new local units (Table 1.2), which are larger than before and contain within them wards that are comparable to VDCs un-

der the previous structure. Wards under the previous system –the unit of analysis for prior IRM qualitative research – are now termed 'settlements/villages.'

In IRM-5, new local units were selected to cover as much of the VDC and ward areas visited in previous phases of IRM. Seven of the nine VDCs visited in previous IRM phases were again covered in IRM-5 (Table 1.2). Two previously visited VDCs (Baruwa VDC in Sindhupalchok, and Dhuwakot VDC in Gorkha) were excluded in IRM-5, as their inclusion would have required visiting a third municipality/rural municipality in these two districts. In addition to the previously visited wards and settlements, research was also conducted at the municipality/rural municipality center and ward offices in each of the local units included in IRM-5.



Map 1.1: Districts affected by the 2015 earthquakes7

<sup>5</sup> Only 34.7% of eligible households in Bhaktapur and 33.4% in Kathmandu (urban) had received the third and final tranche of housing grants as of September 2019, compared to 82.15% in Sindhupalchok and 81% in Gorkha (rural). Accessed from: http://nra.gov.np/np/map-district/datavisualization, on 09/25/2019.

<sup>6</sup> Nepal adopted a new federal constitution in 2015 which mandated the restructuring of the local level. Accordingly, 753 local units were created in place of over 3000 local units under the previous centralized system of governance. Elections were subsequently held for the newly restructured local units in 2017, granting the new local governments wide ranging legislative and budgetary authority under the federal system.

<sup>7</sup> Source GoN/MoHA 2015, retrieved from https://thehimalayantimes. com/nepal/nra-to-distribute-assistance-in-17-more-nepal-earthquake-hit-districts/

Table 1.2: Locations visited in IRM-5 and IRM-4

Districts	Locations visited in IRM-4	Locations visited in IRM-5 *(RMC = Rural Municipality; MC = Municipality)	
	Baruneswar VDC (Wards 1 and 2)	M I - DMO (M I - O - 15)	
Okhaldhunga	Prapcha VDC (Wards 3 and 8)	Molung RMC (Wards 2 and 5)	
	Katunje VDC (Wards 1 and 4)	Sunkoshi RMC (Ward 9)	
Sindhupalchok	Syaule VDC (Wards 1 and 8)	Chautara Sangachokgadhi MC (Ward 1)	
	Lisankhu VDC (Wards 1 and 3)	Lisankhu Pakhar RMC (Ward 2)	
0.11	Barpak VCD (Wards 2 and 5)	Barpak Sulikot RMC (Wards 1 and 2)	
Gorkha	Tanglichowk VDC (Wards 4 and 9)	Gandaki RMC (Ward 2)	
Bhaktapur	NA	Bhaktapur MC (Wards 2, 4, 7, 8, 9 and 10)	
	NA	Suryabinayak MC (Wards 7, 8)	

Locations visited in the new, fourth district, Bhaktapur, were chosen according to the sampling strategy used to select field locations since IRM-1. Field locations were sampled to maximize variation with regard to two key factors: (i) the degree of impact of the earthquake; and (ii) the degree of remoteness/access

to government service centers, such as government offices, schools, and health posts.8

In all four districts, teams collected data at settlements/community, ward, municipality/rural municipality, and district levels.







- 1. Filming of IRM documentary, Bhaktapur, November 2019. Photo: Pallavi Payal
- 2. Interview in Okhaldhunga, November 2019. Photo: Dewan Rai
- 3. Interview in Bhaktapur, November 2019. Photo: Kiran Bhattarai

many local units expanded road connectivity between IRM 1 and IRM 5 which changed connectivity. Additionally, the same ward that was accessible during dry months could be inaccessible in the wet season. Such nuances were recorded and explained in the detailed analysis.

<sup>8</sup> For the IRM study, accessibility was categorized as follows: accessible (high accessibility)—within a four-hour drive of the district headquarters; remote (low accessibility)—over four hours drive and/ or walk from the district headquarters. However, it is important to note that

# 1.4 Policy changes since IRM-4

The Government of Nepal (GoN) established the National Reconstruction Authority (NRA) in December 2015 as the main executive body to assess structural damage caused by the earthquakes, and to devise and implement the post-earthquake reconstruction and recovery plans for the 14 highly-affected districts, and the 18 lesser-affected districts. The NRA itself has limited powers and has to seek approval from the Cabinet for major decisions and policy changes, as well as from the Ministry of Finance to release funds. Despite this, the NRA has been responsive both to evidence-based findings and its own working experiences, displaying a willingness to adapt to improved information, evolving needs, and vulnerabilities.

Since the last round of IRM research in April 2017 (IRM-4), a number of updated or new policies,

guidelines, and operational procedures have been issued. In May 2017, the *Grant Disbursement Procedures for Private Houses Destroyed by the Earth-quakes* was amended to allow landless victims of the earthquakes to purchase land. The *Procedures for the Relocation and Rehabilitation of Hazard-prone Settlements* set out grants for landless earthquake victims, as well as grants for the purchase of land to resettle earthquake victims living in geologically unsafe areas.<sup>11</sup>

In 2017, the NRA also issued an integrated procedure for earthquake victims to access subsidized loans at two percent interest for up to NPR 1,500,000 (USD 12,433<sup>12</sup>) outside the Kathmandu Valley and up to NPR 2,500,000 (USD 20,721) inside the Valley with collateral (*Integrated Guideline on Inter-*



A family in Okhaldhunga, November 2019. Photo: Dewan Rai

<sup>9</sup> Okhaldhunga, Dolakha, Ramechhap, Sindhupalchok, Kavrepalanchok, Sindhuli, Bhaktapur, Kathmandu, Lalitpur, Rasuwa, Nuwakot, Dhading, Gorkha, and Makwanpur.

<sup>10</sup> Sankhuwasabha, Bhojpur, Dhankuta, Khotang, Solukhumbu, Chitwan, Tanahu, Lamjung, Kaski, Parbat, Baglung, Myagdi, Syangja, Palpa, Gulmi, Arghakhachi, Eastern Nawalparasi, and Western Nawalparasi.

The NRA provides NPR 200,000 for the purchase of land in addition to the NPR 300,000 housing grant. For further details on the process see, The Asia Foundation and Democracy Resource Center Nepal (2017). Aid and Recovery in Post-Earthquake Nepal: Independent Impacts and Recovery Monitoring Phase 4 – Qualitative Field Monitoring (September 2016). Kathmandu and Bangkok: The Asia Foundation

<sup>12</sup> All exchange rate conversions according to www.xe.com

est Exemption of Subsidized Loan). A loan of up to NPR 300,000 (USD 2,487) with an interest rate of two percent was also made available for vulnerable households in all earthquake-affected districts, which were recommended to the NRA by the relevant District Disaster Relief Committee<sup>13</sup>. With minimal loan uptake, the government later introduced a new concessional loan policy, effective November 2018, under which the government would underwrite five percent of the interest rate on concessional loans of up to NPR 300,000 (USD 2,487). In addition, banks and financial institutions were allowed to, "scale up profits by up to two percent on their base rate"14 for such loans. Borrowers were required to pay back the loan within five years. The integrated guideline was amended by the Council of Ministers in May 2019 to make the implementation of these loan schemes effective.15

Further, the NRA drafted the *Procedure Relating* to the Identification of Earthquake-affected Beneficiaries from Vulnerable Groups in 2017 and defined four categories of vulnerable groups: single women over 65 years, senior citizens over 70 years, minor-headed households (under 16 years), and those with government-issued disability identity cards. The procedure listed additional support to these groups, including a provision of top-up grants for rebuilding, with NRA either

mobilizing non-government partner organizations, or finding alternatives through its own mechanism or through the support of local governments.<sup>17</sup> The NRA's provision of additional cash support of NPR 50,000 (USD 414) to vulnerable families, "who are not a position to reconstruct their houses even with the [housing reconstruction] grant," was not yet widely implemented in late 2019.<sup>18</sup> However, this top-up grant is to be provided to all those enlisted in the NRA list of vulnerable groups who have not yet taken additional support from non-government organizations as of May 2020.<sup>19</sup>

The NRA has also handed over some limited responsibilities to new local governments in Nepal, elected in late-2017. Between November 2018 and February 2019, the NRA handed over several reconstruction-related responsibilities to local governments in affected areas through the signing of Memoranda of Understanding (MoU). According to these MoUs, the NRA was to continue to do the following: assign and manage employees, such as technical officers; manage major facilities and infrastructure for reconstruction; allocate and issue money; and manage the distribution of cash grants and address grievances. Local governments were to coordinate and oversee employees assigned by the NRA, update and share data on the housing grants, and prepare and implement reconstruction action plans.

## 1.5 Structure of this report

The content of this report continues, as follows:

**Chapter 2** describes the state of reconstruction of houses, looking at progress made since IRM-4, the reasons for differences in progress in areas visited (including challenges specific to urban areas), costs

of rebuilding, and current housing conditions on the ground in newly built houses, partially damaged houses, or in temporary shelters.

Chapter 3 focuses on the housing grants. This chapter discusses experiences and impacts of the

<sup>13</sup> District Disaster Relief Committees (DDRC) are chaired by their respective Chief District Officer (CDO), and functioned as the main governmental coordinating body at the local level with regards disaster preparedness and response until 2017. They have become less active since elected local governments assumed office.

<sup>14</sup> See: https://reliefweb.int/report/nepal/nepal-rastra-bank-or-ders-banks-disburse-concessional-loans-quake-victims

<sup>15 &</sup>quot;Earthquake-affected to have easier access to subsidized loan". 2019. NRA. Available at: http://nra.gov.np/en/news/details/cJjqjJn-RM-oaIgxnJyI9SewgTvKHwAGvolrZ5Lg62fA

<sup>16</sup> Section 5(1) of Procedure Relating to the Identification of Earth-quake-affected Beneficiaries from Vulnerable Groups. See also: 'Environmental and Social Management Framework'. GoN/NRA. 2019. P-8.

<sup>7</sup> In July 2018, NRA executive committee decided to approve four IN-GOs for the implementation of their vulnerable support programs. Available at: https://www.hrrpnepal.org/news-events-detail/94

<sup>18</sup> http://nra.gov.np/en/news/details/vvIBeet91TypYfswcItzVJyubwo-P7lHW1H8wq7qS72I

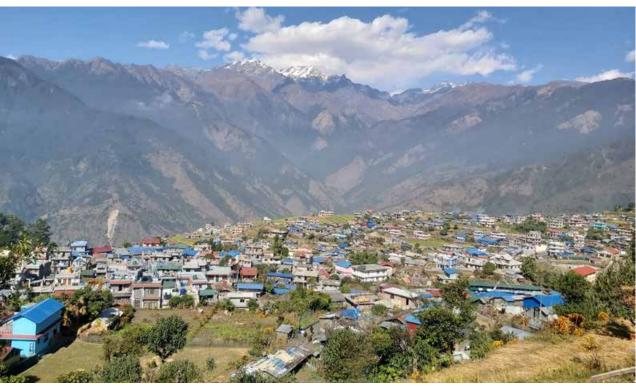
The NRA Executive Committee Meeting held on 8 May 2020, decided to provide top-up support of NPR 50,000 to vulnerable households who have not been able to reconstruct their houses. The beneficiaries should be enlisted in the DLPIU-GMaLI vulnerable list and must not have taken support from partner organizations. They should be endorsed by the Ward Chairpersons followed by Rural Municipality Chairperson or Municipality Mayor with the final approval from the District Reconstruction Facilitation Committee to be eligible for the top-up support. https://drive.google.com/file/d/iiE\_TZJoZ20zFNc-01c5ZVUcZLoNXqcJc-/view

grant process at the local level, including access to the housing reconstruction and retrofitting grants, grievance resolution progress, coordination and the involvement of local governments, and access to technical assistance.

**Chapter 4** explores access to finance beyond the housing grants, looking at borrowing patterns, debt,

sale of assets, access to low-interest loans, livelihoods, and special grants for particularly vulnerable households.

The report concludes with a discussion of main findings and policy implications. The recommendations provided are those of the authors alone and not of the project donors.



Barpak, Gorkha, November 2019. Photo: Manasi Prasai



Photo: Prabhar R Jha

This chapter looks at progress in housing reconstruction and retrofitting in the districts, rural municipalities/municipalities, and settlements visited, as well as at some reasons for differences in progress rates across areas visited. It not only examines where people have completed building, but also what kind of new houses have been built, how much it cost, and how satisfied people are with their new homes.

This chapter also examines the use and repair or retrofitting of partially damaged houses, and specific challenges of reconstruction observed in urban areas. It concludes with findings on those who have not yet repaired or rebuilt their houses nearly five years after the earthquake and continue living in temporary or semi-temporary shelters.

## 2.1 Progress

## **Key findings: Progress in reconstruction**

**Significant reconstruction progress with** many new houses rebuilt. During IRM-5 (November 2019), DRCN found that reconstruction had gained pace over the 2.5 years since IRM-4 (April 2017), and more people were living in newly built houses, while fewer people were living in temporary shelters than in 2017. Progress in retrofitting remained slow.

Progress differed between districts, municipalities, and settlements visited. During previous rounds of IRM research, progress was faster in severely-hit areas of priority districts, while lesser-affected districts received assistance later,

resulting in a rebuilding lag for many people there. All four districts visited in IRM-5 fall into the priority district category, but progress still differed between them.

Urban areas were slower to rebuild due to additional challenges faced there, and a lesser need for fast rebuilding, given other housing options. Some rural areas, on the other hand, have rebuilt very quickly, often due to the urgent need for living and storage space. Yet, other rural and very remote areas lagged behind because of minimal road access and difficulties transporting construction materials, amongst other factors.

## **2.1.1 Progress since 2017**

# Overall, significant reconstruction progress with many new houses rebuilt.

Previous rounds of IRM research observed slow reconstruction progress in the first two years post-earthquakes. Government-led reconstruction had largely focused on setting up and implementing the Rural Housing Reconstruction Program (RHRP) and forming the National Reconstruction Authority (NRA), and thus, little progress in actual reconstruction was observed until IRM-3 (September 2016). The pace of reconstruction in highly-affected districts accelerated after the 2016 monsoon months (July-August) with the distribution of the first tranche of the RHRP housing grant to these areas.20 However, by early 2017, the construction rate slowed again, primarily due to delays in distributing the second tranche of the housing grant as well as high prices for construction labor, and materials and transportation, as well as labor shortages21. Only 44% of households that had sustained complete or major damage had begun rebuilding by IRM-4 (April 2017)22, which means that, in early 2017, more than half had not yet started to rebuild or retrofit their houses.

By IRM-5 (November 2019), DRCN researchers found significant improvements in reconstruction rates across the four districts visited, two of which are categorized as 'severely affected.' In Gorkha, district-level respondents reported good progress rebuilding in the last two years. A Grant Management and Local Infrastructure (GMALI) social mobilizer in Gorkha said, "By the end of the fiscal year 2074-2075 [2017/18], only 47 percent of the reconstruction had been completed [in Gokrha]. We were able to complete nearly 34 percent of the total reconstruction in the district in the fiscal year 2075-2076 [2018/19]. This is the highest rate of reconstruction

in a one-year period in any district during the reconstruction period." In Sindhupalchok district, GMALI and Housing Recovery and Reconstruction Platform (HRRP) representatives estimated that around 85-90 percent of earthquake-affected households in the district had completed building a new house. The general perception of key informants in the district was that almost everyone had taken the third tranche of the housing grant and rebuilt. In Okhaldhunga district, where only two households had received the third tranche in 2017 (0.01 percent of eligible beneficiaries), key informants were satisfied with the good progress in housing reconstruction made in recent years and reported that nearly all those who were able to access the housing grant had now rebuilt.

Official housing grant data confirms these findings. Huge progress had been made since 2017 in distributing the third and final tranche of the housing grant (Table 2.1). The third and final tranche is provided when housing grant beneficiaries have nearly finished their houses. Here, this data is used as an indicator for how far beneficiaries have progressed in rebuilding, as other data is less indicative. Findings from the IRM survey conducted in parallel to this qualitative research also reveal accelerated progress in housing reconstruction. This progress was in large part due to improved access to, and information on, the housing grant process (Chapter 3.1).

In Bhaktapur district, overall progress in third tranche distribution was slower than in the other three districts, and around half of the national average. Yet here too, respondents said more had rebuilt over the last two years and the data also reveals recent progress with 31 percent having received the third tranche, up from under one percent in 2017 (Table 2.1). In general, however, interlocutors in Bhaktapur were less positive about progress made and raised concerns about the slow speed of reconstruction in urban areas (Chapter 2.5).

<sup>20</sup> Distribution of the first tranche of the RHRP housing grant to the lesser-affected districts did not happen until late April 2017, and so was not captured within the IRM-4 survey.

<sup>21</sup> The Asia Foundation (2017). Independent Impacts and Recovery Monitoring Nepal Phase 4 (April 2017) Synthesis Report. Kathmandu and Bangkok: The Asia Foundation. P.71

The IRM-4 qualitative and quantitative research found that being in a more earthquake-affected area, living more remotely, being of low caste, low income, or a widow were all contributing factors to a lack of rebuilding. 93% of respondents who had not started rebuilding said it was due to a lack of funds, with 49% saying they were waiting for the government housing grant. The fastest rebuilding rates were observed in wards with greater outside assistance and internal community support systems. The Asia Foundation (2017). Independent Impacts and

Recovery Monitoring Nepal Phase 4 (April 2017) – Synthesis Report. Kathmandu and Bangkok: The Asia Foundation.

<sup>23</sup> No data exists on who rebuilt outside the housing grant system. However, nearly all of those with damages and declared eligible have signed grant agreements and taken one or more tranches. While those who completed rebuilding receive a completion certificate, few of these had been distributed at the time of writing and the low rate of completion certificate distribution would have misrepresented housing reconstruction progress.

<sup>24</sup> The Asia Foundation (2020). Independent Impacts and Recovery Monitoring Nepal Phase 5 (September-October 2019) – Quantitative survey. Kathmandu: The Asia Foundation

Table 2.1: Housing reconstruction grant distribution in districts visited – in 2017 and 2019<sup>25</sup>

District	Eligible beneficiaries	Enrolled beneficiaries (agreements signed)	1st Tranche received	2 <sup>nd</sup> Tranche received	3 <sup>rd</sup> Tranche received	Percentage who received 3 <sup>rd</sup> tranche <sup>26</sup>
Overall (Total numbers in Nepal), September 2017	752,078	635,289 (85%)	605,385 (81%)	65,011 (9%)	3,902 (0.5%)	0.5%
Overall (Total numbers in Nepal), November 2019	820,610	779,725 (95%)	768,632 (94%)	618,928 (75%)	523,208 (64%)	64%
Gorkha 2017	60,815	54,521 (90%)	54,521 (90%)	6,800 (11%)	1,964 (3%)	3%
Gorkha 2019	65,822	65,883 (100%)	63,548 (97%)	59,990 (91%)	54,758 (83%)	83%
Sindhupalchok 2017	79,917	75,304 (94%)	75,191 (94%)	11,070 (14%)	568 (0.7%)	0.7%
Sindhupalchok 2019	88,608	88,249 (100%)	86,171 (97%)	82,041 (93%)	73,333 (83%)	83%
Okhaldhunga 2017	20,165	18,701 (93%)	18,644 (92%)	3,405 (17%)	2 (0.01%)	0.01%
Okhaldhunga 2019 <sup>27</sup>	21,252	20,466 (96%)	20,355 (96%)	18,872 (89%)	16,327 (77%)	77%
Bhaktapur 2017 <sup>28</sup>	(N/A)	21,736	21,480	559	19	0.09% (of enrolled beneficiaries)
Bhaktapur 2019	28,414	24,541 (86%)	24,541 (86%)	9,319 (33%)	8,818 (31%)	31%

All municipalities and rural municipalities visited in IRM-5 (November 2019) showed noticeable progress in housing reconstruction compared to IRM-4 (April 2017). The same locations were visited in IRM-5 and IRM-4 (except Bhaktapur – see Chapter 1.3). Of the localities (VDCs)<sup>29</sup> included in 2017, over 50 percent of damaged houses had yet to start rebuilding – in some places as many as 90 percent of households had yet to start reconstruction. By IRM-5 (Novem-

ber 2019), around 70-90 percent of houses were observed to have been rebuilt in municipalities visited in Gorkha, Sindhupalchok, and Okhaldhunga districts. In municipalities in Bhaktapur district, at least half of houses still had to be rebuilt. These observations largely match official data on those who received the third and final tranche of the housing grant in the municipalities visited (Table 2.3).

<sup>25 2017</sup> data is from MoFALD CLPIU (update, September 2017). 2019 data is from DLPIU-GMALI, CLPIU-GMALI and CLPIU-Building (25 November 2019).

<sup>26</sup> This share is taken as indicator of completion as data on completion certificates distributed was not easily available for municipality levels (see Table 2.2.).

<sup>27</sup> Data collected at the district level differs for Okhaldhunga: Eligible beneficiares=21,368. Enrolled beneficiaries=23,385. First tranche received=20,635. Second tranche received=19,485. Third tranche received=18,404 (which is 86% of beneficiaries).

<sup>28</sup> NRA/MoFALD/MoUD (17 Sep 2017)

<sup>29</sup> The former VDCs/municipalities were replaced by new, larger Municipalities and Rural Municipalities after local elections in Nepal held at the end of 2017.









- 1. Newly built houses in Barpak, Sulikot Rural Municipality, November 2019. Photo: Manasi Prasai
- 2. Newly constructed house in Gorkha Municipality, November 2019. Photo: Manasi Prasai
- 3. A newly rebuilt house in Gorkha Municipality, November 2019. Photo: Manasi Prasai
- 4. Okhaldhunga, November 2019. Photo: Dewan Rai

# Progress in retrofitting partially damaged houses was slow.

Previous IRM reports have highlighted that over time, more people moved back to partially damaged houses that did not need to be destroyed. In IRM-5 (November 2019), the use of partially damaged houses continued to be common, but most had repairs on their own instead of retrofitting (Chapter 2.4). Uptake of the NRA's retrofitting grant scheme<sup>30</sup> has been very slow since it was made available at the end of 2016, and remained slow in late 2019. DRCN researchers met only one person, in Sindhupalchok, who had successfully retrofitted their house under the government retrofitting scheme (but was yet to receive the second tranche). The research team had only heard of one other person, in Suryabinayak Municipality in Bhaktapur, who had retrofitted their house within the grant scheme. The retrofitting scheme was considered inadequate and difficult to navigate (Chapter 3.2.2).

Researchers met half a dozen people who said they retrofitted their house without the retrofitting grant, despite being eligible, as the grant was seen as insignificant and tied to strict regulations. DRCN researchers also found that repairs, often referred to as 'retrofitting' despite not qualifying as such, were very common in cases where old houses had not been demolished (Chapter 2.4). With repairs, and even some retrofits, done outside of official schemes and without supervision, numbers are more difficult to assess than for those rebuilding. Thus, official data may not reflect actual progress in the recovery of partially damaged houses.

Official numbers on retrofitting reveal some progress since 2017. In September 2017, 24,991 were declared eligible for the retrofitting grant<sup>31</sup>, but distribution of this grant had not yet started. By November 2019 (IRM-5), this number had increased to 69,613, of which 36,491 had received the first tranche (Table

<sup>30</sup> The government has made retrofitting grants of NPR 100,000 available. Houses that were assessed by the CBS as being grade 2 major repairs and grade 3 minor repairs were deemed eligible only for retrofitting grants. See, Grant Disbursement Procedures for Private Houses Destroyed by the Earthquakes, 2073 (2016, revised 2017)

<sup>31</sup> Data from MoFALD CLPIU (update, September 2017).

District	Eligible beneficiaries	Enrolled beneficiaries (agreements signed)	1st Tranche received	2 <sup>nd</sup> Tranche received
Overall (Total numbers in Nepal), November 2019	69,613	37,224	36,491	31
Gorkha	5,294	3,355	3,355	23
Sindhupalchok	605	210	167	0
Okhaldhunga	4,067	2,750	2,750	0
Bhaktapur	700	318	318	2

Table 2.2: Retrofitting grant distribution in districts visited – in 2019<sup>32</sup>

2.2). However, of the 69,613 eligible beneficiaries, only 37,224 had signed beneficiary agreements, suggesting that only around half of those eligible were taking up the scheme. Only a total of 31 households had received the second and final tranche of the retrofitting grant (23 in Gorkha), which further suggests slow uptake. Most of those who received the first tranche may not be using it for technical retrofitting or may be struggling to complete retrofitting their house.

# 2.1.2 Differences in progress across areas visited

## Aggregate district-level data on housing recovery does not reflect differences within districts.

Previously, the IRM research highlighted that progress in reconstruction differed between districts, primarily because of the timing of assessments and the housing grant enrolment process, and because of the amount of outside assistance received.<sup>33</sup> This was found to be detrimental to people in lesser hit districts, where assessments were later conducted and where people received less non-governmental assistance. The aggregate data for lesser hit districts suggested lower damages and lesser needs, but some villages in these districts were heavily hit, needing rebuilding assistance as urgently as those in the severely hit districts. In IRM-5 (November 2019), all districts visited fell into the 14 priority districts category, where assistance was rolled out sooner, and three of the four

districts visited revealed similar progress. The only district showing slower progress in 2019 was the urban district of Bhaktapur due to specific challenges of rebuilding in urban areas (discussed below). Variation was greater at the municipality level. This highlights that aggregate district-level data on housing progress—much like aggregate data on damages—may not adequately represent differing local needs within districts, and overlooks areas falling behind.

# Within districts, progress was uneven and differed noticeably between municipalities.

In Gorkha, receipt of the third tranche differed between the municipalities visited by over 20 percentage points (Table 2.3)34. In Sindhupalchok, Chautara Sangachokgadhi Municipality showed greater progress in distribution of the third tranche than Lisankhu Pakhar by 11 percentage points. Across Sindhupalchok, Chautara Sangachokgadhi Municipality (88% received the third tranche) and Balefi Rural Municipality (also 88%) showed the greatest progress - both are easily accessible - while Bhotekoshi Rural Municipality (55%) - a remote and inaccessible municipality – had the lowest progress rates.<sup>35</sup> In Okhaldhunga district, both municipalities visited had similar rates of third-tranche distribution. However, in this district too, progress between municipalities was uneven. In Khijidemba Rural Municipality, 86 percent of eligible beneficiaries had received the third tranche, while the figure was only 61 percent each for Manebhanjyang Rural Munici-

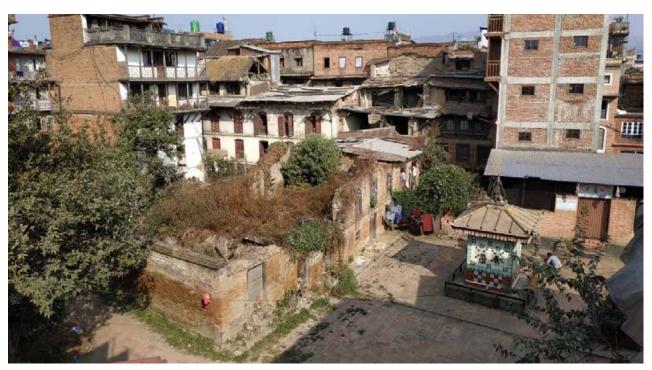
<sup>32</sup> Data from DLPIU-GMALI, CLPIU-GMALI and CLPIU-Building (25 November 2010).

<sup>33</sup> See IRM Qualitative reports published between 2015-2017.

<sup>34</sup> Variation was even greater between former VDCs/municipalities (former, smaller local bodies now replaced by the new, larger Municipalities and Rural Municipalities) in Gorkha district: Across the districts, progress in third-tranche distribution was highest in Gumda (former VDC), now in Dharche Rural Municipality, where 97 percent received the third tranche. In Darbung, Gandaki Rural Municipality, and Uhi-

ya, Dharche Rural Municipality, only 53 percent had received the third tranche. Of the locations visited in IRM-5, Barpak (former VDC) had a third-tranche distribution rate of 94 percent, Tanglichok 75 percent, Gorkha 76 percent, and Nareshwor 94 percent. This data was collected from the District Level Implementation Unit (DLPIU), GMALI, in Gorkha district in November 2019.

<sup>55</sup> Data from DLPIU-GMALI, CLPIU-GMALI and CLPIU-Building (25 November 2019).



Earthquake damage in Bhaktapur Municiaplity, November 2019. Photo: Lena Michaels

pality and Siddhicharan Municipality.<sup>36</sup> Of the two municipalities visited in Bhaktapur district, progress was better in Suryabinyak than in Bhaktapur (Table

2.3). In two other municipalities in Bhaktapur district, around 30-33 percent of eligible beneficiaries had received the third tranche.

Table 2.3: Third tranche distribution of the housing reconstruction grant in municipalities visited, November 2019<sup>37</sup>

District/Municipality	Municipality/Rural Municipality	Eligible beneficiaries (excluding retrofitting)	3 <sup>rd</sup> tranche (in numbers)	3 <sup>rd</sup> tranche (in percentage)
Gorkha district overall		65,822	54,758	83%
	Gorkha Municipality	9,108	7,957	87%
Gorkha <sup>38</sup>	Gandaki Rural Municipality	5,176	3,605	70%
	Sulikot Rural Municipality	7,021	6,538	93%
Sindhupalchok district overall		88,608	73,333	83%
Sindhupalchok <sup>39</sup>	Chautara Sangachokgadhi Municipality	14,580	12,761	88%
	Lisankhu Pakhar Rural Municipality	4,873	3,742	77%
Okhaldhunga district overall		21,252	16,327	76%
Okhaldhunga <sup>40</sup>	Sunkoshi Rural Municipality	3,302	2,613	79%
	Molung Rural Municipality	2,977	2,287	77%
Bhaktapur district overall		28,414	8,818	31%
Bhaktapur	Bhaktapur Municipality	7,656	1,634	21%
	Suryabinayak Municipality	7,425	2,818	38%

<sup>36</sup> Data from DLPIU-GMALI, CLPIU-GMALI and CLPIU-Building (25 November 2019).

<sup>37</sup> Data from DLPIU-GMALI, CLPIU-GMALI and CLPIU-Building (25 November 2019).

<sup>38</sup> Data from the District Level Implementation Unit (DLPIU), GMALI, in Gorkha district, accessed 29 November 2019 is very similar to the figures in this table.

<sup>39</sup> Data from District Level Implementation Unit (DLPIU), GMALI, in Sindhupalchok district, accessed 17 November 2019, is similar to the figures in this table.

<sup>40</sup> Data collected from the DLPIU-GMALI in Okhaldhunga differs: Okhaldhung district: Enrolled beneficiaries=21,368, Third tranche distribution=18,404 (86%). Molung Rural Municipality: Enrolled beneficiaries=3002, Third tranche distribution=2560 (85%). Sunkoshi Rural Municipality: Enrolled beneficiaries=3304, Third tranche distribution=2903 (88%).

## Case Study 2.1: Rebuilding a remote settlement in Okhaldhunga

In Rachane Dada, a Tamang settlement in Sunkoshi Rural Municipality, Okhaldhunga district, all of the houses were destroyed by the earthquakes. People there rebuilt quickly, on their own, but are now questioning this 'success.'

According to a ward member from Rachane, 84 households from the settlement were enlisted as beneficiaries for the housing reconstruction grant. Of those, 79 (94%) have officially completed rebuilding and are living in their new houses. Those remaining are either in the process of rebuilding or have moved elsewhere.

Rachane Dada is not connected to anywhere by road. Raju, a local resident, said it is because of its remoteness that none of the newly built houses are RCC structures. Contrary to the trend observed elsewhere, all of the new houses were rebuilt using locally sourced materials, to the extent possible, such as mud mortar, wood, and stones. Some construction materials, such as zinc sheets and nails, were bought from the district headquarter, about two hours' walk away. Most inhabitants said it took them just over a month to rebuild the houses, as they did not wait for masons, engineers,

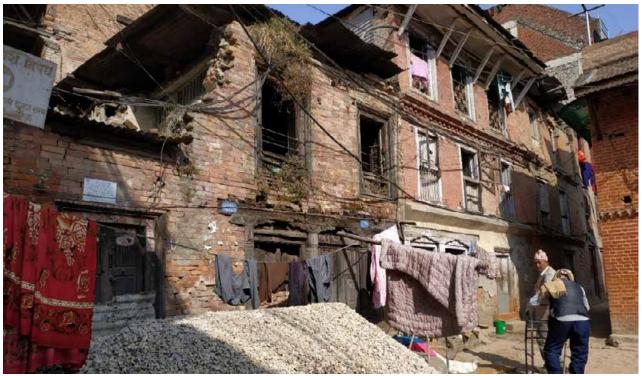
or laborers to come, and instead chose to rebuild themselves, helping each other with reconstruction. This quick reconstruction was motivated by the need for shelter, as their houses had been completely destroyed. They were also pleased with having received the grant in a timely manner, allowing them to build without too much delay.

All of the new houses have two rooms – much smaller than their pre-earthquake houses, which were three storeys high. While locals believe that the new houses are safer, they also feel that they do not provide sufficient space. The people of Rachane also fear their house may last no longer than five years because wooden bands may be damaged by water and cold. They said that some wooden bands are already damaged. They also said they would have built RCC houses with four rooms if their settlements were connected by road.

Every household had to take loans to construct their houses and many young people have gone to work abroad in order to pay back the debts. In Rachane dada, people can only grow food to last them for three to four months per year. During the remaining months, they have to buy food.



Debris of a house that collapsed during the earthquake. Survabinavak Municipality. Bhaktapur. November 2019. Photo: Lena Michaels



Earthquake-damaged houses in Bhaktapur Municipality, November 2019. Photo: Lena Michaels

Within municipalities, too, researchers noticed differences between settlements in rebuilding progress. While progress was slow across all settlements visited in Bhaktapur district, it differed significantly between settlements visited in the other three districts. Reasons given for varying progress and specific local challenges and needs point to factors beyond individual financial capacity and decision-making that have impacted reconstruction.

# There are multiple reasons why progress rates differed between locations visited.

Differences in progress at the district level are primarily linked to the timing and amount of assistance received, which was based on each district's categorization of damages. Differences at the municipality and settlement level can be harder to explain and depend on a large variety of factors. Access to finance, housing grants, construction materials, labor and transportation, community support, and alternative housing options, as well as geographical location (accessibility) and costs of rebuilding were all observed to affect the rebuilding progress. Generally, where households have had access to financial resources, construction materials, roads, and in-kind support from the community (whether labor or material support), rebuilding was faster. Where they did not, it

lagged behind. Specific observations on how the different factors impact reconstruction at both settlement and household level are discussed in more detail throughout the report. Below are DRCN's observations of factors that impacted reconstruction at the settlement level, including the main reasons for differences in progress between the locations, as opposed to between individual households. This can contribute to a clearer and more nuanced picture of reasons why progress was better in some places than others.

#### 1. Geography: Accessibility/road connection

Accessibility and distance to markets was a key factor impacting the ability to rebuild. Better-connected parts of districts showed greater progress, while some remote settlements with poor road networks were slower to rebuild.

After the earthquakes, most people built brick and cement mortar (BCM) or reinforced cement and concrete (RCC) houses, even if they had previously owned stone mud mortar (SMM) houses (Chapter 2.2). This meant that they had to purchase materials that were not locally available in rural areas, such as iron rods and cement. These materials were more easily avail-

able in places near market centers, such as district headquarters and bazaar areas where they could be transported faster and at lower rates to places with good, all-weather roads. Previous IRM reports and current findings have revealed that most households rebuilding spent significant sums on transportation of construction materials, especially in remote areas where road conditions are poor and during the monsoons months when many roads become inaccessible following heavy rains (Chapter 2.3).

In the districts visited in IRM-5 (November 2019), settlements closer to bazaar areas generally had made greater progress in reconstruction than remote ones. For example, in Chautara Bazaar, Sindhupalchok, which has good road connections, people were able to access labor and construction materials quicker and at cheaper rates than in Lisankhu Pakhar Rural Municipality. An engineer in Lisankhu Pakhar explained that, "In Wards 2 and 3, 140 beneficiaries have not even built the foundations for their houses. Only in Nargau and Nigale, 25 households have begun construction." The lower reconstruction rate is primarily due to limited road access to these villages, water scarcity, and restricted mobility of people to and from the village. In Bhotekoshi Rural Municipality in Sindhupalchok, progress was even slower than in Lisankhu Pakhar. This rural municipality was not visited for IRM research, but researchers were told slower progress there was due to its remoteness (earthquake-affected settlements are located up steep hills) and the fact that connecting roads are regularly washed away in the monsoon months. Similarly, in Gorkha and Okhaldhunga, some very remote places showed particularly slow progress due to inaccessibility. Even in parts of an urban district like Bhaktapur, bringing materials uphill to a settlement on the outskirts of the district with poor roads, doubled the price due to additional transportation costs for the Tamang community living there. Access to technical assistance (Chapter 3.2), and to finance (Chapter 4) were additional factors that sometimes hindered speedy reconstruction in remote, rural areas.

Accessibility matters in terms of proximity to market areas and to administrative centers and government offices. The latter provides access to information and faster processing of documentation and supervision to receive the cash grant tranches (Chapter 3.1). In addition, people in more accessible settlements tend to have higher incomes and economic status (see below). Remoteness and lack of financial resources often go hand-in-hand, as most remote places were also observed to be poorer.

#### 2. Geography: Urban

# Progress was slower in urban settlements than in rural areas.

Despite year-round infrastructural connectivity and access to construction materials in Bhaktapur and



Demolishing and transporting debris in a densely built-up area near Durbar Square in Bhaktapur, November 2019. Photo: Kiran Bhattarai

Suryabinayak municipalities, reconstruction rates lagged behind relative to municipalities in the rural districts (Table 2.3). A ward chair in Bhaktapur Municipality said, "There were hardly any houses rebuilt in the first year following the earthquake." By late 2019, many damaged houses and debris had still not been cleared from core areas of Bhaktapur and researchers found a large share of earthquake-affected people continuing to reside in partially damaged houses or shelters. This was because urban areas, especially core urban and heritage areas, faced specific challenges not encountered in rural areas, which has prevented many earthquake-affected households there from rebuilding. Demolishing buildings is costlier and more difficult in densely built-up areas; land plots tend to be smaller; building standards are higher and many prefer building bigger houses which increases costs; and many houses are partially damaged and still in use. Further, those with financial capacity in urban areas rebuilt quickly, often before or outside of the housing grant, while those without financial resources were stuck due to the higher costs and difficulties rebuilding in urban areas (Chapter 2.5).

Some of these challenges also affect peri-urban areas, such as Suryabinayak bazaar areas, as well as district headquarters and bazaar towns. For example, progress in the area of the former Gorkha VDC (which covers Gorkha bazaar, now within the larger Gorkha Municipality) is comparatively slower – although only slightly – than the municipality and district averages. This is despite the fact that people there started rebuilding faster than in rural areas. As a DLPIU representative in Gorkha said, "Initially, houses in the bazaar area started their reconstruction faster, probably because of financial capacity of the householders. Now, reconstruction in rural areas has become faster." However, just three kilometres west of Gorkha bazaar, in Palsang, progress was much better – partly because of the fact that local men had participated in masonry training, which was useful for their own construction and to provide them with an income, which contributes to their own recovery and household well-being.

## 3. Geography: Need for shelter

# Some remote areas rebuilt quickly, often due to their urgent need for proper houses.

Since IRM-1 (June 2015), DRCN observed that some remote settlements managed to rebuild quickly, often by themselves and without aid. This shows that remoteness does not necessarily equal slower reconstruction, despite difficulties accessing materials

and assistance, and higher transportation costs. The reason some remote areas rebuilt quickly was their urgent need for shelter due to the lack of alternative housing options, rough climates, and wild animals. In IRM-5 (November 2019), researchers continued to observe that some rural communities showed good progress in reconstruction despite their remoteness, their limited road access, and that they did not receive large amounts of aid, compared to places, like Barpak in Gorkha. However, they often built smaller or less durable houses with local materials rather than RCC houses.

For example, people in parts of Chum Nubri, in Gorkha, chose to rebuild quickly as the area experiences very cold winters. Another remote village in Gorkha that rebuilt quickly is Manbu, where 97 percent of beneficiaries received the third tranche of the reconstruction grant. In Okhaldhunga, researchers found that a rural community in Rachane Dada in Sunkoshi Rural Municipality showed good progress, with nearly everyone having completed rebuilding despite the fact that the settlement is inaccessible by road. This was because they built small houses with mud, stones and wood, for which they did not need to buy many materials from outside. However, residents there believe their new houses will not last long (Case Study 2.1).

#### 4. Geography: Unsafe land

Despite progress in resettlement, displaced communities have been slower to rebuild and many were still living in temporary shelters or on unsafe land.

Those whose land was destroyed by landslides or declared unsafe have faced additional obstacles to rebuilding and have been particularly vulnerable, as highlighted since IRM-1 (June 2015). Initially, many people did not know whether their land was safe to live on. Over the years, land assessments were conducted and government provisions made special support for displaced households available, such as additional grants for those having to resettle (Chapter 3.4). Nevertheless, local representatives and communities pointed out that the displaced and landless remain among the most vulnerable groups nearly five years after the earthquakes. In all districts, there were still settlements of people displaced during the earthquake who have not yet found a viable long-term living situation. This highlights that, to date, resettlement programs have failed to adequately assess the specific local context, situation, and needs of displaced settlements, especially smaller ones. Serving these groups



Partially damaged house, Bhaktapur, November 2019. Photo by Lena Michaels

### Case Study 2.2: A resettled community in Sindhupalchok

Around 25 households, mostly Brahmins and Chettris, live in the Kerabari village of Chautara Municipality. The village was severely damaged by the earthquake, being at the bottom of a land-slide-prone hill. After the earthquake, Kerabari residents moved to a safer place around one kilometre from the old village. Almost all have received all three tranches of the government reconstruction grant, with which they built stone mud mortar (SMM) houses of two rooms, using mostly locally sourced material. They supplemented the grant with savings, remittance money, income,

and loans in order to cover the costs of reconstruction. NGOs also provided them with support and materials to build toilets.

The new settlement has not been surveyed by geologists, so the safety of the new site is not confirmed. The community feels they should have received additional assistance as displaced people, rather than being treated simply as having lost their homes. The community also faces the absence of reliable sources of drinking water, and a poorer road network than in their old settlement.

more holistically requires solutions beyond individual cash grants or large integrated settlements.

In IRM-5 (November 2019) the numbers of displaced households had decreased, as more people have either returned to their land, or resettled on new land with government or non-government support. For example, around 30 households in Kerabari, in Sindhupalchok, were found to have resettled near their old settlement and have completed rebuilding (Case Study 2.2).<sup>41</sup>

In Okhaldhunga, Molung Rural Municipality, a group of 18 households still living in temporary shelters was about to be relocated with support from a non-governmental organization that was building new homes for them. In a different settlement in Molung, two displaced households had relocated — one of them

<sup>1</sup> Short film interviewing resettled household in Sindhupalchok: https:// asiafoundation.org/video/irm-project-interview-singh-bahadur-khatri-kerabari-sindhupalchok/



Rachane Dada, a Tamang settlement in Sunkoshi Rural Municipality, Okhaldhunga, November 2019. Photo: Dewan Rai

with the government's resettlement grant of NPR 200,000 (USD 1,662) (Case Study 4.1 in Chapter 4).<sup>42</sup> Neither of them had received the full housing reconstruction grant, but rebuilt by taking loans from local moneylenders.

Unfortunately, several settlements have yet to find permanent solutions. As far back as IRM-1 (June 2015), this research had raised the issue of a Dalit settlement in Barpak, Gorkha, having to move temporarily to government land after their settlement was deemed unsafe for living. In 2019, they still lived on that land, unable to rebuild or make plans. Nearly five years after the earthquakes, the Dalits in Gaihrigaun lived in a dense settlement of salvaged and new tin and wood, with outdoor toilets and water taps. These shelters did not seem suitable for winter. In Tasera, Gorkha, seven households were waiting to be resettled, but expected to be given new land before the next monsoon, according to information they had received. Displaced households in Khani Gaun, Gorkha, that were still living in temporary shelters, were also waiting for a decision on where they should resettle. Beneficiaries squatting on public land around the bazaar area in Palungtar, Gorkha, refused to be resettled elsewhere and demanded *lalpurja* – land ownership papers – for the land on which they have been squatting. While the case remains unresolved, they remain in temporary shelters.

In Sindhupakchok, several displaced settlements had not yet been able to resettle elsewhere, such as in Jugal, Selang, Barhabise, and Ghumthang villages. In Okhaldhunga, displaced Dalit households continued to live in unsafe conditions in Prapcha village, Molung. They had initially been provided temporary shelters on government land after the earthquake, but later returned to their old, unsafe land due to the discrimination they faced in the main village.<sup>43</sup>

Some earthquake-affected households preferred staying on unsafe land over resettling elsewhere. For example, a man interviewed in Okhaldhunga, Molung, repaired his old house quickly after the earthquake, but was later told that he was in a landslide-prone high-risk zone and needed to resettle. He was offered a government resettlement grant, but initially refused it, stating, "My house, land, and farm are here. Why would I go elsewhere?" When pressured by government officials, he took the resettlement grant and started building a new house a few kilometres further down the road, but he continued living in his old place. He did not receive the second and third tranches of the government housing reconstruction grant, which put him in debt (Case Study 2.3).

<sup>42</sup> More information on the government's resettlement grants is included in Chapter 3.4.

<sup>33</sup> See Case Study 3.5 on p. 27 of the IRM-4 qualitative report: The Asia Foundation and Democracy Resource Center Nepal (2017). Aid and Recovery in Post-Earthquake Nepal: Independent Impacts and Recovery Monitoring Phase 4 — Qualitative Field Monitoring (April 2017). Kathmandu and Bangkok: The Asia Foundation

### Case Study 2.3: A man refusing to leave his land despite geological risks

Dhakananda, 62, has been living in a settlement in Prapcha village, Okhaldhunga, which was assessed as geologically hazardous. He was offered the resettlement grant, but refused to leave his place because he had already completed rebuilding by the time the land assessment was conducted, and because his farmland is nearby.

Dhakananda built his house following NRA building codes. When he completed the house, a group of geologists assessed the area as too risky to reside in. The team recommended relocation of the settlement. Thus, he did not qualify for the housing reconstruction grant.

"It was not my fault. I started constructing the house as soon as I got the first tranche. I needed a house because my [old] house was destroyed completely. I started construction on time and completed it in a month. I was informed about the risk only when the construction of the roof was going on. I did not want to leave like that, so I completed the house. It cost me 600,000 rupees [nearly USD 5,000] to



build this house," said Dhakananda.

Dhakananda still works in the field, but he is not strong enough to make money from agriculture or other work. "I don't think I will be able to pay back my loans if the government does not help me. I started constructing the house hoping for the housing grant. Now, the grant money will not be enough to pay back the loan itself," he said.

#### 5. Access to assistance and resources

Uneven progress in reconstruction can sometimes be attributed to uneven access to aid or assistance. Initially, delays in the distribution of the housing grant were found to have slowed reconstruction in districts visited for the IRM research.<sup>44</sup> By IRM-5 (November 2019), the grant distribution and grievance resolutions processes had improved



Photo: Lena Michaels

and Bangkok: The Asia Foundation. And: The Asia Foundation and Democracy Resource Center Nepal (2017). Aid and Recovery in Post-Earth-quake Nepal: Independent Impacts and Recovery Monitoring Phase 4 – Qualitative Field Monitoring (April 2017). Kathmandu and Bangkok: The Asia Foundation

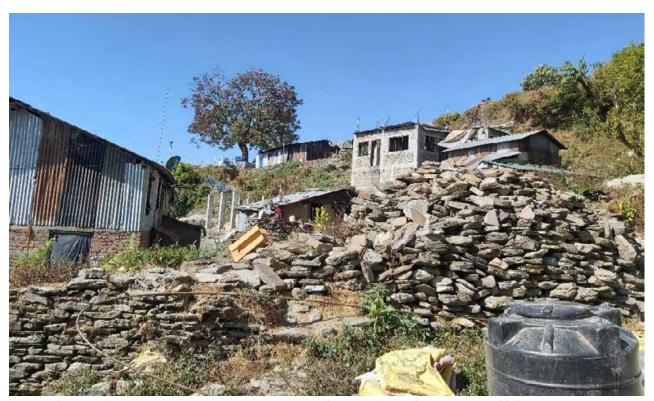
<sup>44</sup> See IRM-3 and IRM-4 qualitative reports: The Asia Foundation and Democracy Resource Center Nepal (2017). Aid and Recovery in Post-Earthquake Nepal: Independent Impacts and Recovery Monitoring Phase 3 – Qualitative Field Monitoring (September 2016). Kathmandu

significantly and access to the grant money had become easier (Chapter 3.1). However, since reconstruction costs were higher than the housing grant money across areas visited (Chapter 2.3), access to additional support continued to be crucial. As observed during previous rounds, places that received greater amounts of aid and outside assistance have generally fared better; they not only progressed faster in their reconstruction, but also often built bigger or more expensive houses. For example, in Barpak in Gorkha district, the epicenter of the April 25th earthquake, almost all homes were rebuilt as RCC structures despite the remoteness of the settlement. This was possible due to the many forms of aid provided (whether financial, material, or via trainings), which were comparatively higher in Barpak than in other parts of the district, and higher in Gorkha overall than in many other earthquakeaffected districts. However, aid alone did not necessarily facilitate reconstruction for everyone. In some places of Sindhupalchok, a district that has received much outside assistance, reconstruction was slower than in others, despite similar levels of assistance received.

### Community support and access to local materials facilitated progress in reconstruction.

While external assistance can play an important role in helping people rebuild, IRM research previously highlighted that internal support also mattered, and areas with better social cohesion and traditions of labor-sharing systems (such as parma and allo-pallo practices) fared better. In IRM-5 (November 2019), several settlements with good progress in reconstruction, such as in Palsang, Gorkha, or in Rachhane Dada, Okhaldhunga, cited strong community support with rebuilding as one of the reasons for their success. Tight-knit local communities were also found to jointly make use of local construction materials, such as wood or stones, and helped each other transporting these. In the past, however, Dalits were often left out and did not benefit from these forms of community support or local resources.<sup>45</sup>

While some socio-cultural practices were beneficial for reconstruction, others hindered it. For example, in IRM-5, the Tamangs in Sindhupakchok would only build houses on auspicious dates determined by priests, which often delayed construction.



Remnant of earthquake damage and new houses under construction in Gaihrigaun, Barpak, Gorkha, November 2019. Photo: Manasi Prasai

<sup>45</sup> The Asia Foundation and Democracy Resource Center Nepal (2016).
Aid and Recovery in Post-Earthquake Nepal: Independent Impacts and

## Local governments' involvement in reconstruction did not contribute to differences in progress across areas visited.

Between November 2018 and February 2019, the NRA handed over selected earthquake reconstruction-related responsibilities to newly elected local governments (Chapter 3.5). The level of involvement of local governments in reconstruction was similar across areas visited and was perceived positively by communities. Local governments – ward offices in particular - have shared information on the reconstruction process, helped individual households access information or file grievances (Chapter 3.1.2), and made access to technical officers and engineers easier (Chapter 3.2) for communities. As such, they can be seen as having facilitated reconstruction although important decision-making and implementing powers remained with the NRA (Chapter 3.5). Yet, the contributions and roles of local governments did not have an impact on differences in progress across the municipalities or settlements studied.

# Wealthier settlements with access to stable local incomes or other economic resources progressed more steadily in their reconstruction – except urban areas.

Access to financial resources is a key factor determining whether households are rebuilding or not (Chapter 2.6, and Chapters 3 and 4). As such, settlements where more people have access to such resources, have often rebuilt faster and better. Stakeholders and key interviewees in all districts pointed out that wealthier settlements and places where people have access to higher-income livelihoods and other financial resources were generally recovering better than rural settlements where people rely on subsistence or small-scale farming – with the exception

of urban areas, especially in the Kathmandu Valley, where progress was still slow.<sup>46</sup>

For example, in Palsang, near Gorkha Bazaar, reconstruction was progressing well. Local men had benefitted from masonry training, which enabled them to contribute to rebuilding their own houses and also provided them with income. This suggests that income-generating schemes could potentially go a long way in supporting people rebuild (see also Chapter 4.2). Other areas around Gorkha bazaar had also progressed well, in part due to higher economic status of communities settled there, according to key informants in the district. Similarly, in Chautara Sangachokgadi Municipality, Sindhupalchok, good progress was attributed to the accessibility with surrounding areas, and the comparatively better economic status of residents compared to more remote parts of the district.

Access to sources of income in the area also matters in other ways. If people cannot generate incomes locally, they tend to migrate for jobs elsewhere in the country or abroad. In previous IRM research rounds, some places were slower to progress due to the absence of the younger generation whose labor and support was needed to rebuild. In IRM-5 (November 2019), labor migration was not seen to have a direct impact on the speed of reconstruction, but many cited it as an option they resort to in order to finance rebuilding.

There were also places where reconstruction was slow because wealthier residents were living in Kathmandu and are less concerned about rebuilding their rural houses. This was the case in one ward of Lisankhu Pakhar, Sindhupalchok, where 60 to 70 households had moved to Kathmandu. They received the first tranche of the housing grant, according to local residents, but did not rebuild because they now lived elsewhere.

<sup>46</sup> Economic wellbeing of earthquake-affected people was also seen as an important for successful reconstruction in Bhaktapur district – but only at the household level, not at settlement level, due to generally slower progress in reconstruction across settlements in this district due to specific urban challenges (Chapter 2.5).

### 2.2 Reconstructed houses

### **Key findings: Newly built houses**

People generally preferred constructing modern concrete houses, replacing older building techniques and designs and changing the look of settlements. Fewer people built stone and mud houses, mostly because they are cheaper and can be built more quickly and with local materials.

Newly-built 'earthquake houses' tend to be smaller than pre-earthquake houses, especially in rural areas. For this reason, the mixed use of smaller new houses and older partially damaged houses, or temporary shelters, was common in cases where older houses were not completely destroyed. Some people built small houses to receive the housing grant, but did not use them at all, or used them for secondary purposes, such as storage or livestock.

People were generally satisfied with their new houses, especially those who built code-compliant concrete houses, and perceived them to be safer than their old ones. However, they were dissatisfied with the small size of their new homes and many planned to expand them in the near future.

## 2.2.1 What do new houses look like

People preferred brick and cement mortar (BCM) or reinforced cement and concrete (RCC) houses in both rural and urban areas. Fewer built stone and mud mortar (SMM) houses.

The study found that the general perception was that BCM and RCC structures were safer and sturdier than SMM structures. There was also trust in the advice and expertise of NRA engineers who were present in assisting in the reconstruction process and generally advising people to build BCM or RCC houses. As a result, in both rural and urban settings across districts, most of the new homes have been rebuilt as RCC or BCM structures, including by those who had previously lived in SMM homes. This changed the looks of rural settlements that had previously used old building techniques and designs. Beneficiaries believed newly built concrete houses were safer than their previous houses, having developed an awareness of the necessity to build earthquake-safe houses. As a ward chair in Lisankhu Pakhar, Sindhupalchok, summed up, "The lesson from the earthquake reconstruction process is that it is necessary to build earthquake-resilient houses to keep ourselves safe and secure." Fewer people built SMM houses. Those who chose SMM often did so to save costs, as SMM houses are cheaper to build. SMM houses were more common in remote areas where transporting materials needed for RCC and BCM structures would mean significant additional costs (see Chapter 2.3 for information on costs of reconstruction). In a remote settlement in Okhalhdunga, people rebuilt houses with stones, mud, mortar, and wood at a fast pace. The high rate of reconstruction was possible, as all materials were locally available, and villagers rebuilt themselves, helping each other with construction, without needing to wait for masons or contractors to arrive (Case Study 2.1). Resettled households in Kerabari, Sindhupalchok, also built SMM houses with locally sourced materials (Case Study 2.2).

People were often confused about how to make an SMM house earthquake-safe. In Barpak, Gorkha, the few households who rebuilt SMM houses reinforced the structures by using cement and rebar banding to make them safer. This accounted for less than one percent of houses, while all other new houses in Barpak were built with RCC. In Gorkha bazaar, the few households who chose to rebuild SMM houses did so mainly for financial reasons. Yet, some saw the traditional way of building houses as a better solution. A respondent in Sindhupalchok raised the question of health, as cement houses tend to develop mold and are poorly insulated from outside temperatures. "Mud and stone houses are better for old people to live in," he thought.

## Newly-built houses tend to be smaller than pre-earthquake houses in rural areas.

Rebuilding BCM or RCC houses proved to be expensive for the vast majority of households. As a result, most beneficiaries chose to build a two-room house, downsizing from their previous house (Case Studies 2.4, 2.5, and 2.7). With limited space, most continued using their old house or temporary shelters in some capacity, or added annexes to their new house, such as a kitchen accommodating a firewood stove. K.R. Nepal of Prapcha, Okhaldhunga, explained of his new house. "It is small for any family. We used to live in a three-storeyed house. Now, we have adjusted to a two-room house. We have been using the old house too. I am a farmer. This house is not suitable for farmers. Storage of grains is one of the most important purposes of the house for us. In winter, dew drops onto grain kept in the attic, and it gets very hot during summer. So, the grain starts rotting fast." Sub-engineer Dinesh Lama estimated that beneficiaries might have seen the new houses as temporary, explaining the reluctance to build a large house. He said, "In my opinion, a two-room house seems to have been thought of as a transition home for earthquake affected families living in temporary shelters immediately after the earthquake."

## To accommodate needs, some have expanded their houses without adhering to NRA guidelines

Due to misconceptions about what types of houses people could build with the NRA grant, most thought they had to build a one- or two-room house resembling early NRA model houses (Chapters 3.1.5 and 3.2.2). Those who wanted to build bigger, often either built outside the grant or built a smaller NRA-approved house, but then expanded it without necessarily following the building guidelines for earthquake-resistant houses. For example, BN Manandhar in Bhaktapur lived in a single house with his family of eight. In order to accommodate this big family, he added an additional storey to the accepted design. Although he received all tranches of the grant money, he did not receive the completion certificate because of he did not complete the house according to the approved building guidelines. An HRRP staff in Bhaktapur noticed that many beneficiaries were adding an additional storey to their house after hav-



- Two-room house with wood banding, rebuilt with materials salvaged from the old damaged house in Sulikot Rural Municipality, Gorkha, November 2019. Photo: Manasi Prasai
- 2. Two-room house in Mandre, Sulikot Rural Municipality, Gorkha, November 2019. Photo: Manasi Prasai
- 3. House rebuilt with materials salvaged from the old house in Paslang, Gorkha, November 2019. Photo: Manasi Prasai
- 4. One-room SMM house in Kerabari, Sindhupalchok, November 2019. Photo: Aruna Limbu

ing received the third tranche of the grant. This was also the case in the other districts and many more said they planned to expand their house in the future (see below).

## New houses were sometimes built just to receive the grant money.

In some areas severely affected by the earthquake, many people had no choice but to rebuild their houses fast, before receiving the grant money. In order to still benefit from it, these people sometimes built a second, smaller house adhering to NRA guidelines. This was observed in Chautara, Sindhupalchok. "Engineers did not provide technical assistance in time," explained B. Lama of Lisankhu Pakhar Municipality. "They only complained about the houses being built and asked for us to rebuild in order to meet the housing requirements." Similarly, in Okhaldhunga, technical assistance proved useful for many beneficiaries, who took advantage of it to rebuild a second house adhering to the codes. For example, L.B. Sarki of Ramtel first built a two-storev house with four rooms under supervision by the ward representatives and engineers. He was subsequently told he would not receive the completion certificate, so he built another two-room house in order to receive the full housing reconstruction grant.

#### Some used their new code-compliant houses for secondary purposes, such as storage or livestock.

In some instances, DRCN observed beneficiaries using their new code-compliant houses to store grain and goods, or to keep livestock rather than to live in. This was the case in a settlement in Okhaldhunga. A father and son both received the reconstruction grant following the collapse of their houses in the earthquakes. As the son lives outside of the village, his father lives in one of the new houses and uses the other to keep his goats and to store grass. The use of newly built 'earthquake houses' for secondary purposes was also common in parts of Sindhupalchok where some older houses remained. In Sindhupalchok, researchers met many people who were using their new houses for livestock or cooking while they continued to live in their old, partially damaged houses.

### The mixed use of smaller new houses and partially damaged houses or temporary shelters was common.



House under construction in Barpak, Sulikot Rural Municipality, Gorkha, November 2019. Photo: Manasi Prasai

Across districts visited, beneficiaries continued to use old, damaged houses or temporary shelters alongside their new code-compliant 'earthquake houses.' This was the case as the new houses tended to be smaller (most commonly two rooms) due to the comparatively higher cost of construction. Where older houses were not fully destroyed, people have continued using them, such as in Bhaktapur, as well as less severely hit areas of Gorkha, Sindhupalchok, and Okhaldhunga (Chapter 2.4). A housing grant beneficiary in Sindhupalchok explained, "My house was partially damaged by the earthquake. We repaired it and were staying there. The technicians from the ward asked us not to stay in the house, so now we use it as kitchen, storage, and also a bedroom. We do not have sufficient space in the one-room house built with the housing reconstruction grants. So, we do not have a choice but to use the old house. Most of beneficiaries here are living in their old house as well as new house, like we are."

### Case Study 2.4: Building an NRA-code compliant BCM house in Gorkha



Dalit-owned leather workshop in a rented earthquake-damaged house in Old Gorkha Bazaar, November 2019. Photo: Manasi Prasai

Ms. Pariyar runs a tailoring and leatherwork shop in Gorkha bazaar. Her mud mortar and brick house, where she lived with her two children and her husband, was fully damaged by the earthquakes. Her family then lived in a small cottage where she had previously kept her chicken and the family workshop, while still using their damaged house for cooking and storage. She obtained the housing reconstruction grant for a new house, which she built with consultation and assistance from NRA engineers. The new house is two-rooms, made with cement pillars, rebar rods, and brick and cement walls.

Complying with the NRA building codes would have cost her too much money to rebuild a house the same size as her previous one. Thus, she decided to downsize. Despite reusing some material from the old structure, such as bricks and the wooden door and window frames, the NPR 300,000 (USD 2,500) grant was not enough to cover the costs of construction. She took out a loan of NPR 100,000 (USD 831) from a community cooperative at 18 percent interest (annually). She has now repaid her debts, usingearnings from her enterprise. She envisions adding more rooms to her house, as her children grow and need more room. She has moved her enterprise to a rented shop in Gorkha bazaar, which has helped her earn more income than before the earthquakes. "In fact," she notes, "the business is better now despite having to pay rent. Having a shop and a workshop in the main bazaar has increased our number of customers."

## Case Study 2.5: 'We would have made a bigger house' – A man in Okhaldhunga recounts his difficulties

"Although the house is strong, it is not big enough for a family of four. There is no room for guests and grains. We wanted to make a bigger a house. They would not approve it. We added a kitchen room. I am thinking of adding more rooms in future. We did not have money to buy cement and iron rods for safety bands. Timber is also not cheap either. It is very expensive here. For this house, I bought timber worth Rs 1.5 lakh [USD 1,250]. We had to carry stones from far places."

"We would have made a bigger house, had government allowed us to design our own house. We had to take loans. It would be a great help for us if the government could provide loans. We would use it to rear livestock. We need an income source to keep our life going. Since there is no other option, I have decided to go abroad for foreign employment to pay back my loan."

"We spent three years under a tarpaulin. Villagers used to compete making big houses. They used to

make three-storied houses. The earthquake levelled us all equal."

"I worked in Malaysia as a security guard for three years immediately after the earthquake. Then I came back to build the house. It took me almost 15 months to take the second instalment [of the housing reconstruction grant]. For some, it took even two years. We would travel to Okhaldhunga district headquarters and come back empty handed. The ward office informed us about the tranche disbursement."

"We built a house which is safe. But since the house's base is timber, we think it might not last more than five years from now. We think it is a temporary house. The safety band of the foundation is made up of wood, which has started rotting. I wanted to lay cement as foundation, but technicians would not allow us to do so. The wooden band has started to decay too."





- 1. New one-room house in Attarpur, Sindhupalchok, November 2019. Photo: Aruna Limbu
- 2. New two-room SMM house in Rachane, Okhaldhunga, November 2019. Photo: Dewan Rai

The continued use of old houses was also due to the fact that the new, RCC houses were not always considered adapted to rural life. A sub-engineer in Okhaldhunga said, "We must admit that the [NRA code-compliant] houses are not suitable to people's lifestyle." Poor insulation from the cement and the absence of an attic meant grain could not be stored in a secure manner in these houses. They also did not provide a space to cook using wood-fired stoves, which meant that temporary shelters, old houses, or external annexes were commonly used as kitchens.

After the earthquake, people in severely hit areas where most houses had collapsed completely, built semi-permanent shelters to live in and store their grain. Over time, as they have moved into newly rebuilt houses, many have continued to use their earth-

quake shelters for a variety of purposes, such as storing grain and cooking. Only those who lacked space or were able to rebuild bigger houses were observed to have fully removed their temporary shelters.

In some places, people even used all three structures: newly built houses, older partially damaged houses, and temporary shelters. For example, in Nareshwor, close to Gorkha Bazaar, people were living in a combination of old houses, new houses, and temporary shelters. Temporary structures of tin and wood were still used for non-sleeping purposes, such as the storage of grain or livestock. In villages up the hill from Suryabinayak Bazaar, people were still using their old houses for livestock, and temporary shelters for cooking or storage space, even after having moved to their new house.





- 1. Houses built to receive the housing reconstruction grant in Sindhupalchok, November 2019. Photo: Aruna Limbu
- 2. Newly built one-room house in Sindhupalchok, currently not in use, November 2019. Photo: Prabhat R Jha





- 1. A newly built house used as a buffalo shed in Sindhupalchok, November 2019. Photo: Aruna Limbu
- 2. A rebuilt house used as a buffalo shed in Sindhupalchok, November 2019. Photo: Prabhat R Jha

#### Limited evidence of reconstruction of houses serving the needs of people living with disabilities.

Most engineers and technical support staff said that they had not been approached to modify houses to accommodate persons living with disabilities. It also seemed that engineers assigned to support the reconstruction of households with disabled family members did very little to design the houses to accommodate their needs. The relative of a disabled individual in Gorkha, who had started rebuilding her house as soon as she received the first tranche, did not know she could consult with NRA engineers to make her house disability-friendly. Only in Barpak, Sulikot Rural Municipality in Gorkha, a social

mobilizer said that two local households with persons living with disabilities had had houses specially constructed with ramps and handrails. Some schools were also rebuilt disability-friendly, such as the school in Lisankhu Pakhar Rural Municipality, Sindhupalchok. However, in general, it seemed that limited attention was given to disability by technical officers, and that there have been limited consultations around disability as a vulnerability, and around how to address it in the reconstruction process.

#### 2.2.2 Satisfaction

Beneficiaries are mostly satisfied with the quality and safety of new houses.





- Partially damaged house (right) and newly reconstructed house (left), both used by the same family, in Gandaki Rural Municipality, Gorkha, November 2019. Photo: Manasi Prasai
- 2. CGI earthquake shelter still used for storage in Bhaktapur, November 2019. Photo: Pallavi Payal

There was widespread agreement that the new houses were significantly safer to withstand future earthquakes. This came from a general perception that BCM and RCC structures are sturdier than SMM ones, and from the trust placed in the technical assistance provided by NRA engineers. Sarita BK from Molung, Okhaldhunga, expressed a common view. She said, "Although the new house is small, I feel safe living here." However, the level of satisfaction with the new homes depended on the changes between living situations before and since the earthquake. As a result, poorer families, who had previously lived in modest homes, were more satisfied with their new homes, made possible by the government grant (Case Study 2.6). Those who had previously lived in larger houses and had a steady income or savings, complained about the sum of the grant, and the possibilities it gave. In Chautara, Sindhupalchok, an earthquake victim did not even bother applying for the money. "Our family chose not to receive the retrofitting grants since the sum of NPR 100,00 [USD 831] is not sufficient to retrofit the house and we do not want to be trapped in the complicated government process which takes up a lot of time."

### Beneficiaries are mostly unsatisfied with the size of their new homes.

Generally, the newly built houses were smaller than pre-earthquake houses, with only one or two rooms. As a result, they were often perceived as a downgrade, in terms of accommodating the family's spatial needs. An NRA sub-engineer in Prapcha, Okhaldhunga, conceded, "We have to admit that the house is not suitable for rural lifestyles. This two-room house is not adapted to the hills' topography or people's lives." This space restriction has led people to continue using damaged houses in some capacity, whether for storage or as kitchens. Local representatives in Gorkha also assessed that while the quality of the rebuilt houses was satisfactory, their suitability was not.

## 2.2.3 Future plans for newly built houses

### Beneficiaries plan to expand and customize their new homes.

The study found that beneficiaries were already expanding or contemplating expanding their new houses. In Gorkha, several had built new homes so that additional structures could be subsequently added onto the terrace. This was primarily because of insufficient living space. Homes have been built so that the pillars and concrete roof will allow for a second storey to be added. Most often, beneficiaries planned to add an awning to the side of the house to accommodate an outdoor kitchen. This type of annexing was already visible in some places, such as

### Case Study 2.6: A single woman recovers with the help of government grants

Seti Maya is a single mother from a low caste who raised her three children following her husband's death. She earned money by working as an agricultural wage laborer and lived on land owned by the community forest. The house she lived in collapsed during the earthquake, after which she moved to a temporary shelter constructed with support from an NGO, where she still lives today.

She received the NRA's provision of NPR 200,000 (USD 1,662) for landless victims of the earthquake, which she used to buy four aanas of land nearby (approximately 1,369 square feet). So far, she has received two tranches of government aid to build a house on that land, which she hopes will be completed within a year. She is still very economically vulnerable, unable to work as a laborer due to health reasons, while being a primary carer



Seti Maya in front of her shelter, November 2019. Photo: Prabhat R Jha

of two granddaughters. She relies on NPR 2,000 (USD 17) per month of government aid. The aid she received following the earthquakes allowed her to buy land and build a house, neither of which would have been possible for her in the past.

Barpak, where there was the presence of tin awnings added to houses to accommodate wood-fire stoves, rather than gas stoves. Beneficiaries, like SB Chepang, who have built concrete roofs instead of the recommended iron truss and corrugated iron roofs, plan to add a second storey of 'lighter material,' such as tin sheets or attics made of wooden planks. Some beneficiaries have coordinated with NRA engineers to plan for future expansions, while others built or planned expansions without technical assistance and without following approved building codes. There were instances where the ward office, like in Rampur in Okhaldhunga, had stopped distributing house completion certificates to deter beneficiaries from modifying the design of their houses.

## 2.2.4 Where are people rebuilding

### People usually build on land they owned since before the earthquakes – with the exception of the displaced.

The vast majority of people rebuild on their own land which they, or their family, had owned since before the earthquakes. Few bought new land to rebuild, but some sold old land to pay for reconstruction – a trend that seems to be increasing, especially in urban areas (Chapter 4.1.4). Many rural households have lost agricultural land due to the space their new houses occupy.

Those who were displaced or need to be resettled also have certain demands regarding where to rebuild that the government sometimes struggles to accommodate. Some want to build on land they had occupied near market areas and refuse to move further away. A DLPIU representative in Gorkha assessed that Palungtar was experiencing the slowest rates of reconstruction as they had not yet been able to manage land for those who need to be resettled. She explained, "Here, people with ancestral properties elsewhere are occupying public land without using the resettlement grant of NPR 200,000 (USD 1,662), but are insisting on rebuilding in the market area." Displaced people currently living in temporary shelters on government land near the road in Laprak want to be given the land they currently occupy, which has led to a standstill in the resettlement effort over the past five years. Others, however, preferred staying near their original land, refusing to move further away, even if the new land is better connected.

#### In many of the places visited, people tried to rebuild on land closer to roads or bazaar areas.

Since the earthquakes, there has been a visible growth of market areas, such as Gorkha Bazaar in Gorkha district, or Chautara in Sindhupalchok, with a proliferation of buildings over time – partly because people have sought to move closer to more profitable market or well-connected areas. In some places, researchers also observed movement within wards or settlements where people have moved closer to road heads. For example, in a settlement in Suryabinayak Municipality, located up the hills on the outskirts of the Kathmandu valley, most people moved a few minutes downhill from their original village to rebuild new houses by the road. People there said they built next to the road to avoid having to pay demolition costs and porters to carry construction mate-





1. A woman in her rebuilt house in Okhaldhunga, November 2019. Photo: Dewan Rai

<sup>2.</sup> A man inside his rebuilt house in Okhaldhunga, November 2019. Photo: Dewan Rai

### Case Study 2.7: Building a new small house in Okhaldhunga with the housing grant

Ms. Tamang, from Molung Rural Municipality, Okhaldhunga, managed to rebuild her house, thanks to NRA support. The new house cost NPR 800,000 (USD 6,650) to rebuild and the family had to sell their valuable land in the centre of Rampur bazaar in order to complement the grant. Ms. Tamang found that NRA technicians were helpful,

present, and provided useful assistance. She said, "They frequently came to oversee the construction process." Her concern now is that her new two-room house is small for a family of five, although safe. They continue to use a kitchen external to the new house.

rials further up the hill. In Bhaktapur Municipality, many people built on the periphery of the core urban heritage area, to rebuild faster and more easily than possible inside densely built-up heritage areas. However, even when rebuilding elsewhere, people usually retained their old land and house. In Bhaktapur, for example, a beneficiary was building a new house in Changunarayan and used his old, damaged house in his village as storage and for periodic returns home.

## Access to water sources also influenced how and where people rebuilt.

There has been outmigration from areas without water. As observed in previous IRM reports, water sources changed after the earthquakes, often due to landslides and geological changes, which meant that many areas reported dried up springs and a lack of water. This affected reconstruction and recovery in two ways: first, it made the lives of people trying to

recover their livelihoods difficult, and second, it contributed to the outmigration of people from an area. An engineer in Bhaktapur told DRCN, "Even though Bhaktapur is a core city area, narrow alleyways and lack of water made reconstruction difficult." An engineer in Lisankhu Pakhar, Sindhupalchok, explained, "Some households are not able to build, even to DPC level, because of a lack of road access and scarcity of water." For Ms. Tamang of Chhap Danda in Chautara of Sindhupalchok, the lack of drinking water is a major concern. Mr. Shrestha, a local politician, said that the earthquakes had caused the springs in the area to dry up. He said, "We had to search for an alternative water source in the area. We are lucky that we found a water spring through the water drilling project initiated by the municipality," he said. In some cases, the lack of drinking water has encouraged people to migrate to other areas. For example, many in Bhaktapur were rebuilding outside the core city, not only because access was easier there given wider roads, but also because water supply was better.





- A newly built code-compliant house with pillars and rods for future extension, Sulikot Rural Municipality, Gorkha, November 2019. Photo: Manasi Prasai
- 2. A newly house with pillars and rods for future extension, Suryabinayak Municipality, Bhaktapur, November 2019. Photo: Lena Michaels



Rebuilt houses in Lisankhu settlement, Sindhupalchok, November 2019. Photo: Aruna Limbu

### 2.3 Costs of reconstruction

#### **Key findings: Costs of rebuilding houses**

Average costs of rebuilding houses far exceed the amount of the housing reconstruction grant, even in rural areas.

Prices for construction materials and labor have changed over time. Demand for construction materials has increased since the earthquakes, with local sellers reporting significantly higher sales. Supply and demand has had an impact on the costs of construction materials and on labor, both of which have fluctuated since the earthquakes. In many areas, costs had decreased in late 2019 compared to early 2017. However, costs for certain local resources have increased since the 2017 local elections due to increased local controls and taxes.

People in remote areas have paid a significant share of overall rebuilding costs on transportation. This is because of difficulties transporting materials to areas without roads or without year-round road access. Due to monsoon damages to roads, the costs of purchasing construction materials fluctuate seasonally, as already observed during previous IRM research rounds.

In urban areas, reconstruction costs were higher than in rural areas, despite better accessibility. This is due to the type of houses built, higher costs of building in heritage areas, and high demolition costs.

## Average costs of rebuilding houses far exceed the amount of the housing reconstruction grant.

The government grants of NPR 300,000 (USD 2,500) for reconstruction (and NPR 100,000 [USD 831] for retrofitting) cover only a part of the total

rebuilding costs.<sup>47</sup> These grants, as partial support for housing recovery, were never intended to cover all costs of recovering the housing needs, but to act as an incentive to rebuild safer and in accordance

 $<sup>\,</sup>$  47  $\,$  See Chapter 3 for more information on the housing grants.

with NRA standards. Yet, previous IRM reports have highlighted that many beneficiaries hoped or expected the government grants to fully pay for rebuilding. People repeatedly complained that the grants only covered a fraction of the overall costs. People also expected access to soft loans, and in some places took out loans from local money lenders at high interest rates right after the earthquake to cover immediate household costs, which they expected to repay later after receiving the government soft loan (Chapter 4).

The average cost of reconstruction ranged from approximately NPR 500,000 (USD 4,200) in Okhaldhunga, and around NPR 600,000 (USD 5,000) in Gorkha, to a few million in Bhaktapur. At NPR 800,000 (USD 6,700) even for a basic two-room structure adhering to NRA building codes, the costs in semi-urban areas in Sindhupalchok was higher than in Gorkha. In rural Tasera of Gorkha, where a month's daily wages were sufficient to purchase from the community forest all the timber necessary to build a new house, the NRA housing reconstruction grant of NPR 300,000 (USD 2,500) was sufficient. According to the IRM-5 survey, people have spent an average of NPR 1,196,887 (USD 10,000) on their

new houses. Costs differ by size of the house. A oneroom house costs an average of NRR 450,013 (USD 3,700), a two-room house an average of 688,209 (USD 5,700), and a house with three rooms or more costs more than 951,514 (USD 7,900) on average.<sup>48</sup>

## Costs for construction labor and materials have fluctuated since the earthquakes.

Wages for laborers have increased, and then decreased after the earthquakes. Immediately after the earthquakes, rural areas saw an influx of laborers from Terai-Madhesh and Karnali Province districts, where the impact of the earthquakes had been low. These laborers filled the vacuum left behind by the youths from hill settlements migrating abroad as laborers – a situation that changed only when local women and youths were trained as skilled masons. In Lisankhu Pakhar of Sindhupalchok, for instance, laborers from Jumla, Humla, and Surkhet commanded between NPR 800 (USD 6.70), for a porter who carried loads, to NPR 1,500 (USD 12.50), for a skilled mason, per day. In 2016, in Arughat of Arughat Rural Municipality in Gorkha, masons were available to hire for NPR 800 (USD 6.70) per day. In

### Case study 2.8: Costs of reconstruction in Barpak

Barpak is 66 kilometres from Gorkha Bazaar. Among the closest large settlements from the epicentre of the April 25 earthquake, Barpak has absolutely transformed post-reconstruction. Very few houses have been rebuilt in the traditional stone and mud style; most of the new homes are reinforced concrete structures requiring materials, like cement, rebar rods, sand, and gravel.

Construction materials come mostly from Gorkha Bazaar, Abu Khaireni, and Narayanghat, with Chhewetar serving as the closest hardware market. Chhewetar is a few kilometres from the Khaireni-Gorkha highway, on the road to Barpak and beyond. A tractor-load of construction materials costs NPR 15,000 (USD 125) to transport from Chhewetar. Typically, a reconstructed house required four such tractor-loads of materials, like cement, rebar rods, sand, and gravel.

In April 2018, coinciding with the distribution of the second tranche of the reconstruction grant, OPC cement for general use cost NPR 980 (USD 8) per 50-kg sack, while PPC cement for deep foundation and damp-proofing course (DPC) cost NPR 830 (USD 7). Iron rebar was NPR 90 (USD 0.75) per kg. Sand was carried from the Rangrung River, where the road begins its climb up to Barpak, but the quality of sand there is not optimal for construction. Sand for the DPC and reinforced cement concrete (RCC) pillars was bought from Abu Khaireni. A tipper-truck load of sand from Abu Khaireni cost between NPR 34,000 (USD 283)- 36,000 (USD 300), as of November 2019.

The wages for a day-laborer have stabilized at NPR 800 (USD 6.70) since April 2018. Typically, laborers work from sunrise until sundown, which counts as one and a half days of labor, costing NPR 1,200 (USD 10) in wages for the day's work.

<sup>48</sup> The Asia Foundation and Interdisciplinary Analysts (2020). Aid and Recovery in Post-Earthquake Nepal: Independent Impacts and Recovery Monitoring Phase 5 – Quantitative Survey (September-October 2019). Kathmandu: The Asia Foundation

April of 2018, when beneficiaries began utilizing the second tranche to raise the walls on their new houses, masons commanded a daily wage of NPR 1,500 (USD 12.50), owing to the relative shortage of skilled masons and high demand for their time. By 2019, the average daily wage of such skilled masons had dropped again to NPR 1,000 (USD 8.31).

The price of construction materials, which had increased in the aftermath of the earthquakes, had declined again by IRM-5 (November 2019). Costs of construction materials seemed to rise alonside demand. Tranche release dates increased the purchase of materials at certain times, while deadlines for the three stages of reconstruction (foundation and the DPC, walls, roof) also increased the demand for material – leading to shortages and higher costs in some places. As for labor costs, the cost of materials was higher during peak construction seasons in 2016 to 2018, while it has since declined again, although overall demand is still higher than before the earthquakes. Seasonal weather and damages to roads also led to fluctuations in costs (see below).

For example, in Gorkha, around April 2018, after the distribution of the second tranche of NRA grants, approximately 60,000 structures were being constructed simultaneously under the NRA grant schemes, alongside other private construction projects. This created a considerable strain on the supply of construction materials, manifesting in the sharp increase in the price of day-labor and natural resources, like gravel, sand, and water, and also in the cost of transportation of factory-produced materials, like cement and rebar, from bazaar areas into the villages. In mid-2018, the cost of one kilo of rebar in Gorkha Bazaar was approximately NPR 96 (USD 0.80). The cost decreased to about NPR 82 (USD 0.68) by November of 2019. In Suryabinayak, a local Tamang man reported that the prices of materials had decreased. The price of iron rebar had decreased to NPR 72-73 (USD 0.60-0.61) per kg from more than NPR 80 (USD 0.67) per kg a few months before November of 2019. The price of cement had also decreased to NPR 700 (USD 5.82) per 50 kg sack from NPR 900 (USD 7.50). Another man from the same ward said he previously bought stones at NPR 23,000 (USD 191) per tipper-truck load, which had now dropped to NPR 13,000 (USD 108). BB Tamang from the same ward said that he had paid up to NPR 105 (USD 0.87) per kg for iron rebar.

Some thought more should have been done, or should be done, to control the price of construction-related materials. A political party representative in Bhaktapur said that prices should be controlled to avoid the fluctuations observed since the earthquakes and to help those rebuilding plan how to cover costs.

### Costs for local resources have increased since the 2017 local elections.

Costs for certain local materials seem to have increased after Nepal's local elections in late 2017, due to new regulations and taxes imposed by the new rural municipalities and municipalities. For example, in 2016 in Arughat, Gorkha, a tractor-load of sand cost NPR 2,500 (USD 21). In November of 2019, a tractor-load of sand cost about NPR 6,500 (USD 54). This steep increase was due to the fact that, in 2016, before local elections took place, there was no cost associated with mining for sand on public land, yet by 2019, local governments had started levying a tax on sand mined from public land. Similarly, in Chautara, Sindhupalchok, stones required for construction cost NPR 10,000 (USD 83) per truck load.

Local governments have begun legislating control over local resources, like timber, sand, stone, and gravel, thereby restricting ready and oftentimes free access to natural resources. One consequence of this was the entry of private entrepreneurs bidding for licenses to extract and sell resources. "Established business houses entering the 'excavator game' to control the extraction and sale of sand and gravel contributed to the rise in prices of construction materials. The commercialization of this process added financial burden to beneficiaries trying to rebuild," said a local politician in Gorkha. In Sunkoshi Rural Municipality, Okhaldhunga, locals bought timber from the community forest to build their houses, and carried the stones from local sources. A man there said he spent half of the NRA grant on sourcing timber.

## Overall, demand for construction materials has increased since the earthquakes.

While there was already much construction in urban areas before the earthquake, rural areas have seen a huge increase in construction and corresponding demands for materials that are not locally available, such as cement and iron rods. In Gorkha, for example, only 20 percent of factory-produced construction materials are reportedly consumed by Gorkha Municipality. The remaining 80 percent are provided to rural areas via hardware shops in Gorkha Bazaar. These hardware shops have seen a massive increase in business from pre-earthquakes times. According to the owner of one such store in Gorkha Bazaar, be-

### Case Study 2.9: High transportation costs in remote settlements

Ms. Magar, from Gordi in Gorkha, replaced her two-room stone and timber house with a two-room brick and cement-mortar house, with support from the NRA housing reconstruction grant. She is among the small share of beneficiaries who reported an improvement in living conditions as a consequence of the earthquakes since her previous 'unsturdy' home had been replaced by a more robustly constructed house of the same size. She was a member of a local savings cooperation, and therefore could borrow NPR 100,000 (USD 831), in addition to the housing grant, to complete the new house. This additional financial burden may well have been avoided if it had not been for the

remoteness of Gordi and additional transportation costs of materials that Ms. Magar had to cover.

Gordi is right across from the Trishuli river and is connected to the Prithvi Highway by a suspension bridge. In Gordi, locally available construction materials, like sand and gravel, are transported on tractors. The bricks and rebar come from Narayanghat, some 52 kilometers away. These materials are unloaded by the side of the highway, walked across the bridge over the Trishuli, and loaded onto tractors at the riverside settlement of Buttar for transportation to Gordi, around 10 minutes uphill. Each step along the way adds cost in the form of portage.

fore the 2015 earthquakes, there was a chronic shortage of construction materials in Gorkha Bazaar. The store sold approximately 2.5 thousand sacks of cement a year before April 2015. That amounts to 125 tonnes per year, at 50 kg per sack. Since 2016, this store alone has averaged sales of 35 tonnes of cement per month, or 420 tonnes a year.

## All-year road access, or lack thereof, continued to have an impact on transportation costs and ultimately, overall construction costs.

In remote rural areas, the costs of purchasing construction materials have fluctuated seasonally, because of monsoon damage to roads. Construction costs increased during the monsoon months - even though these months do not traditionally see much construction, and therefore, the demand for material is correspondingly low. Likewise, it decreased during the winter months – even though, conversely, these months see higher rates of construction and a consequent increase in demand for material. This was because many roads in remote areas are inaccessible during the rainy season, which raises transportation costs, due to the difficulty of navigating unpaved mountain roads. This had an impact on people's ability to buy and transport construction materials, and to rebuild, not only since the beginning of the IRM research, but particularly since IRM-3 (September 2016) when people started rebuilding.

In IRM-5 (November 2019), remote settlements continued to raise the issue of transportation of materials during monsoon. For example, of the 120 households

a JICA mobile mason had been looking at in a settlement in Lisankhu Pakhar, Sindhupalchok, 10 beneficiaries had not even started reconstruction, despite receiving the first tranche. "This is because of problems in transportation during the rainy season," he said. In higher altitudes without road access, construction materials are transported on mules. This cost adds up quickly, with beneficiaries having to bear transportation costs of around NPR 75 (USD 0.62) per kg of sand. Even in semi-urban areas, such as the outskirts of Bhaktapur or Suryabinayak, reconstruction costs were higher because of added transportation costs, due to worse road conditions than the more urban areas of these two municipalities.

Generally, people in remote areas have paid significant shares of the overall reconstruction costs on transportation – not only during monsoon months. For example, the rural municipality of Chum Nubri, Gorkha (already remote and cut off from state and financial institutions) faced an urgent need to rebuild before the winter of 2016. Chum Nubri is 'north of the Himalaya,' and without road access. Beneficiaries purchased iron rebar for reinforced cement concrete pillars and bands, paid NPR 100 (USD 0.83) per rebar at the bazaar settlements to bend them into a size suited to loading on mules, transported the material on tractors and mules from the market to their villages, and upon reaching their destination, paid another NPR 100 (USD 0.83) per rebar to straighten them.

In IRM-4 (April 2017), roads were cited as both an immediate and long-term need by all respondents in three of the surveyed districts, including Gorkha

### Case Study 2.10: New house built at high costs, but too small for an urban family

Mr. Nagarkoti is a contractor from Bhaktapur who lives his family of six under the same roof. His house was damaged in the earthquake and unsafe for habitation. With the grant money, he built a new house. But he said that building an NRA-code compliant houses is expensive, which is why he built only a small house and continues using the old one to accommodate his family's needs.

"The house cost me NPR 2.5 million (USD 21,000). How does the government think that NPR 300,000 (USD 2,500) is enough?", he asks. Not only is the new house inadequate, although safe, but Mr. Nagarkoti is also having a hard time paying back his debts. To supplement the government grant, he took out a loan of NPR 1 million (USD 8,300) and borrowed NPR 500,000 - 700,000 (USD 4,200 - 5,800). Some of these loans, borrowed from people from his village, have an annual interest rate of 10-12 percent. He does not know how he will be able to repay his debts.

and Sindhupalchok (also surveyed in IRM-5). Road conditions continued to be a major concern in all districts surveyed in IRM-5 (November 2019). An HRRP representative in Sindhupalchok shared, "Transportation network is the greatest challenge to reconstruction work in the district."

## Reconstruction costs were higher in urban areas than in rural areas, despite better accessibility.

Urban areas in the Kathmandu Valley and semi-urban areas along major highways were found to have lower prices of construction materials and transportation. However, respondents generally agreed that overall rebuilding costs were higher in urban areas, far exceeding the amount of the housing reconstruction grant. Although the availability of transport and proximity to market made construction materials cheaper in urban centers, other considerations, like demolition and debris-clearance, the availability and cost of land to build upon, and the type of houses being built made construction more expensive in urban areas.

In urban areas, most people wanted to build larger and more modern houses than in rural areas, which increased costs. Many preferred to wait, rather than build a smaller house – partly due to the fact that they had limited land to build on and wanted to rebuild a multi-storey house suitable for housing large joint families, rather than building multiple separate small houses, like people in rural areas had done. In addition, labor can be more expensive in urban areas, where most people hire contractors, rather than local masons. People in urban areas are also less likely to receive help from neighbors and family than those in rural areas where traditional labor-sharing

practices are still sometimes used. Further, municipal requirements regarding the appearance of the facade and uniformity of construction material also added to the cost of construction in such locations. This particularly affected heritage areas in Bhaktapur, in which required materials, such as traditional bricks, wooden windows, and slanted wooden roofs, are expensive. Labor costs for heritage houses are also higher, as specially trained masons are required. One of the most significant factors rendering urban reconstruction expensive, however, was high demolition costs.

## Demolition costs, especially in urban areas, continue to be high and to delay reconstruction.

Many residents in urban areas faced high costs of demolition, which added to overall costs of rebuilding and meant some (especially poor residents) could not afford building new houses. Respondents in the urban center of Bhaktapur often pointed to the cost associated with clearing out debris as a hindrance to rebuilding. In some locations, it would cost a beneficiary the entire reconstruction grant of NPR 300,000 (USD 2,500) just to demolish and clear their old house. For instance, in the inner alleys of Bhaktapur, some houses did not have road access to allow the use of tractors or trucks to transport the debris from the damaged houses, therefore requiring human labor to clear the debris. Demolition in such locations was further complicated by the fact that houses had been built in compact formations, requiring expert diligence and time to dismantle a structure to avoid accidental damage to adjoining houses. Although Bhaktapur Municipality provided a cost-free site to dump the debris, there were still costs to transport the debris to the site.



Remote earthquake-affected settlement in Okhaldhunga, November 2019. Photo: Dewan Rai

These considerations translated into higher-than-average costs, even before reconstruction could begin.

For example, Purna Devi, 80, of Bhaktapur Municipality, said that the first tranche of the rebuilding grant that her family received was spent on removing the debris of the top four floors of her six-storey house to make the remaining floors habitable. Pancha Bahadur, 77, said that it cost nearly NPR 100,000 (USD 831) to carry the debris of his damaged house to the main road, from where each tractor-trip to the municipal dumping site cost a further NPR 800 (USD 6.65).

Many complained that the government housing reconstruction grant was not even enough to demolish their old house. As a journalist in Bhaktapur said, "People haven't even been able to clean up their old house; the government's three lakh [NPR 300,000] is not enough to demolish, so how can people build a new house?" A ward chair in Bhaktapur thought, "Three lakhs is little, but if it were provided in one instalment, then people could at least demolish their old homes and remove the debris."

### 2.4 Repairs and retrofitting

### Key findings: Repairing and retrofitting partially damaged houses

Houses that were partially damaged during the earthquakes continued to be widely used – except places where all houses were fully destroyed.

In rural areas, people who had already rebuilt tended to use their damaged houses mostly to store goods or livestock. In urban areas where fewer had completed rebuilding, partially damaged buildings deemed unsafe for habitation were still widely used to live in. However, even in rural areas, some people were still living in their partially damaged houses, either because they had been unable to rebuild or because their new houses were too small to accommodate the entire family.

The repair of old houses generally happened alongside the building of new houses, and most people did repairs themselves, without technical supervision. The most common repairs were removing upper floors and covering cracks – not structural retrofitting. Very few did the latter, but people often referred to repairs as 'retrofits,' as the distinction and technicalities of retrofitting were not well understood.

## 2.4.1 Repair and retrofitting of partially damaged houses

## The repair of old houses generally happened alongside the building of new houses.

IRM-5 (November 2019) found that repairs were common where reconstruction had not yet begun or where old houses were only partially damaged and could still be used after some repairs. Repair of damaged houses was driven by the need to meet lifestyle requirements, such as storage or cooking space, and sleeping quarters for large families (Chapter 2.4.1). The emotional attachment to ancestral homes was also a factor in the decision to repair old homes for some families. Most repairs were done without technical supervision by earthquake-affected households themselves.

In areas where houses had been damaged, but not fully destroyed, fewer households were demolishing and removing their old houses – sometimes resulting in the visible doubling of structures, such as Patiswara village in Gorkha. The repair of old, partially damaged houses was especially common in urban areas in Bhaktapur Municipality.

In Bhaktapur, the majority of those who had not started reconstruction had repaired their old houses to live in – around 80 percent, according to estimates of key interlocutors. In Okhaldhunga, around 70 percent of those who had repaired their old houses had also built new ones, while only a small share of those who had repaired old houses lived in them because they were unable to build a new one. In some places in Gorkha, the continued use of pre-earthquake houses after repairs was also common, especially in areas with lesser damages, such as around Gorkha bazaar and in Tanglichok. This was less so in Sindhupalchok, where damages had been more extensive. However, even there, "There are altogether 1,500 to 2,000 older houses being used by beneficiaries in the district who also built one-room homes from the housing grants," according to an HRRP representative and engineer in Chautara.

### Damaged houses were modified for continued use by removing upper floors.

The practice of 'adapted demolition' (reducing the weight of the house by removing upper storeys) was common, notably in urban areas. In Bhaktapur, where houses are typically tall with many floors, many households removed upper floors of the damaged house and continued living in the lower one or



A woman carrying the debris from an earthquake-damaged house in a narrow ally in Bhaktapur, November 2019. Photo: Kiran Bhattarai

two floors. Similar arrangements were also seen in Gorkha bazaar and Suryabinayak Municipality. The damaged structures were 'repaired' by removing the top floors, which were then covered with lighter tin sheets in order to continue using the space – either for living, storage, or livestock.

## The distinction between retrofitting and repairs was not well understood and very few houses were being retrofitted.

Due to a lack of coordination and information on retrofitting, households with housing damages, as well as engineers and other stakeholders, did not sufficiently understand the specificities of retrofitting. Thus, there was limited uptake of the government's retrofitting scheme (Chapters 3.1.5 and 3.2.2).

Almost no beneficiaries were found to be doing retrofitting and instead, pursued "our kind of retrofitting", according to a man in Bhaktapur, which involved using the grant money to conduct superficial repairs on their own. This included covering cracks with cement or plaster without investing in proper structural reinforcements. Since he had not used iron bars or pillars in his repairs, this beneficiary, like many others, did not receive the second tranche of the grant, but had run out of money to do further work. Many others also referred to repairing old houses as 'retrofitting,' especially in urban areas of Bhaktapur.









- 1. Pre-earthquake houses in Suryabinayak Municipality, Bhaktapur, November 2019. Photo: Lena Michaels
- 2. Partially damaged older houses still in use in Old Gorkha Bazaar, November 2019. Photo: Manasi Prasai
- 3. Partially damaged and repaired house in Sindhupalkchok, November 2019. Photo: Prabhat R Jha
- 4. A damaged house in Bhaktapur being propped up by wooden poles, November 2019. Photo: Lena Michaels

The need for retrofitting, or the safe repairs, of partially damaged houses still remains. With so many continuing to use their damaged houses after doing minor repairs without technical supervision, questions and concerns about the safety of these houses remain. A teacher in Lisankhupakhar, Sindhupalchok, reasoned, "Had clear, adequate information about retrofitting been disseminated on time, perhaps more people would have carried out proper retrofitting rather than simple repairs. This would have saved them some money and helped preserve our traditional houses." Even five years after the earthquakes, many houses across affected districts could still benefit from retrofitting, but confidence in the practice has remained low with people questioning whether it is worth spending so much money on 'repairs,' rather than rebuilding, and questioning whether it would really make houses safer.

## 2.4.2 Use of partially damaged houses

Partially damaged houses were still used in some capacity in both urban and rural settings.

Older houses were still widely used if they had not been fully destroyed or made unusable by the damages. Previous IRM research found that most people initially lived in temporary shelters, but many returned to partially damaged houses as time passed and continued to live there while rebuilding. By IRM-5 (November 2019), the mixed use of new and old houses or shelters remained common in most of the areas visited (Chapter 2.2.1), although more people had rebuilt and shifted their primary living quarters from the old house to the new one by that time. In urban areas, however, partially damaged houses were still mostly used to live in. Most notably in Bhaktapur, more than half of households with housing damages were still living in their old house. As R Bista from Bhaktapur Municipality reasoned, "We have no place else to stay, and sleeping outside is also unsafe, so we would rather keep staying in the old house." Urban areas face the additional difficulty of demolishing houses or clearing debris through narrow alleys, which makes it more expensive and fewer people have been able to remove their old house to build a new one (Chapter 2.3). In rural areas, people





- 1. Earthquake-damaged house now used as goat shed, in Suryabinayak Municipality, Bhaktapur, November 2019. Photo: Lena Michaels
- 2. Earthquake-damaged house used for storage and poultry after removing upper floors, in Suryabinayak Municipality, Bhaktapur, November 2019. Photo: Lena Michaels

were found to use older houses for primarily for livestock and storage space (see below).

## In rural areas, damaged houses were mostly used for the storage of goods or livestock.

While beneficiaries perceived their newly built houses to be safer, the new homes were not adequate for their needs, as most beneficiaries in rural districts had built small, one- or two-room houses (Chapter 2.2). These small houses were seen as inadequate to address the functional and cultural needs of rural households. For this reason, many continued using their old houses alongside their new ones. The most common arrangement across visited sites was the use of new homes as sleeping and living quarters (as they were perceived to be safer), and the continued use of old houses to store goods or house livestock. Households in rural areas required particularly large storage spaces, for the storage of grain, wood, and for animals. However, in Patiswara village in Gorkha,

the opposite seemed to be the case, with old houses being used as primary living spaces and new ones being used as supplementary structures for storage. Some households in Sindhupalchok were continuing to live in their old houses, which were larger and considered more comfortable, while using the new 'earthquake houses' for livestock or storage.

#### With no other choice, some poor people were still living in their damaged houses deemed unsafe for habitation.

In the urban centre of Bhaktapur, many people did not have the means to rebuild, especially single or elderly people without a family support network and regular incomes. In Bhaktapur Municipality, people generally owned no more land than that which their house was built on, and therefore, they had nowhere to build even a temporary shelter. Thus, they have continued living in their partially damaged houses, after minor repairs (Chapter 2.5). Urban poor and

### Case Study 2.11: Living between a shelter and a damaged house

Kanchi Tamang from Lisankhu Pakhar, Sindhupalchok, lost her house in the earthquake. Despite engineers recommending that the house was unsafe to live in, she was left out of the beneficiaries' list, so she did not have the means to rebuild a new house. "We have repaired the old house on our own," she explains. "We mainly use the old house as a kitchen and a storeroom for our agricultural harvests. We live in a combination of the old house and the shelter." Large cracks were clearly visible on the external walls of the old house, suggesting it might be an unsafe place to be. The family has taken steps to receive the government housing grant to reconstruct, by travelling to the district head-quarters and registering grievances at their ward office, but have yet to hear back. "We do not feel safe living in this repaired house, but we do not have any other options."



- 1. A Dalit woman in front of her earthquake-damaged house in Sunkoshi Rural Municipality, Okhaldhunga, November 2019. Photo: Indu Tharu
- 2. Earthquake-damaged house and CGI shelter, in Suryabinayak Municipality, Bhaktapur, November 2019. Photo: Lena Michaels
- 3. Unused earthquake-damaged house in Suryabinayak Municipality, Bhaktapur, November 2019. Photo: Lena Michaels
- 4. Earthquake-damaged house now used for livestock after removing the front rooms and terrace, in Suryabinayak Municipality, Bhaktapur, November 2019. Photo: Lena Michaels

Dalit families in Bhaktapur Municipality were found to be most likely to still live in badly damaged houses, often without even minor repairs (Chapter 2.5, and Case Studies 2.12, 2.13, 2.14, and 2.15).

DRCN researchers met several people in the three rural districts visited who have continued living in their partially damaged houses. A man in Okhaldhunga explained his situation, "Initially, engineers assessed my house as unsafe. We were not in the beneficiaries' list in the second survey. We registered a complaint and got enlisted in the list for a partial grant [retrofitting grant]. I received NPR 50,000 [USD 415] as a first installment and bought tin sheets with the money. Now, I have no money to build a new house. So, we have been living in our old house, which is fully damaged."

## People would reject the forceful demolition of old houses, as would local governments.

According to local government representatives, it would be difficult to enforce policies to demolish old houses because so many are still using them for various purposes. Local officials thought that people would protest if they had to demolish their old houses and added that they would support protests and would not enforce the demolition of houses. If the policy of mandatory demolition of old houses were to be strictly implemented, this may create conflict and tensions with local governments and communities.





- 1. Renovation of more than three centuries old temple in Bhaktapur, November 2019. Photo: Pallavi Payal
- 2. Reconstruction of temple damaged by the earthquake in Bhaktapur, November 2019. Photo: Kiran Bhattarai

## 2.5 Challenges of urban reconstruction

### **Key findings: Challenges of urban reconstruction**

**Urban reconstruction is lagging behind rural reconstruction.** The reasons for this are complex. Urban land plots are smaller, but people tend to build bigger houses and construction is more expensive. Many houses are partially damaged, but demolishing and rebuilding is more difficult due to adjoining buildings and narrow alleyways. Further, landownership patterns, land disputes, and specific rules associated with higher costs for rebuilding in heritage areas have also prevented many from successfully rebuilding in urban areas.

The urban poor tend to be worst affected, lacking other options and continue to live in vulnerable conditions.

Few settlement- or municipality-level initiatives to support urban reconstruction were found. Despite challenges specific to urban areas, little had been done by late-2019 to address these at the local level and support urban housing recovery.

## Some obstacles to rebuilding are specific to urban areas and are rarely encountered in rural areas.

As mentioned in Chapter 2.1, progress in housing reconstruction has been slower in urban areas, especially inside Kathmandu Valley, where people have fallen behind in receiving all tranches of the housing grants and completing rebuilding. The researchers found multiple reasons for this, most of which are exclusively encountered in urban areas, outlined below.

1. The majority of urban houses did not fully collapse, and demolishing in urban areas is more difficult due to adjoining buildings, restricted access due to narrow alleyways, and higher demolition costs. For these reasons, many people in urban areas have continued using their old houses after minor repairs, rather than demolishing and rebuilding them (Chapter 2.4).





1. Demolishing and rebuilding on a small plot between houses in Bhaktapur, November 2019. Photo: Lena Michaels

- 2. Transporting construction materials in narrow alleys in Bhaktapur Municipality, November 2019. Photo: Lena Michaels
- 2. Land plot size and needs for building space differ in urban areas compared to rural areas. In urban areas, people have smaller land plots, but are not building small 'earthquake houses.' Instead, they require larger multi-storey houses to accommodate extended family, and sometimes space for income-generating shops on the ground floor.
- 3. Small land plots, related family land disputes, and certain landownership patterns are additional reasons why urban reconstruction has fallen behind.
- Specific building rules and requirements for heritage areas have complicated urban reconstruction, and raised construction costs in heritage sites.
- 5. Overall building costs are higher in urban areas (Chapter 2.3), making it particularly difficult for the urban poor to recover (see below) or forcing people into high debts or sale of land (Chapter 4.1.4).

Joint family landholdings and family disputes was a key reason for slower reconstruction rates in Bhaktapur district. Land plots in urban areas tend to be small and joint families traditionally share multi-storey houses. This means, multiple nuclear families need to come together to plan, finance, and complete reconstruction of larger houses. Families often found it difficult to coordinate and come to agreements. In Bhaktapur Municipality, family disputes were frequently reported by respondents as the main challenge to urban reconstruction. This includes disputes among siblings for ancestral land, or the listing of one brother as a beneficiary among many brothers, or disagreements between husband and wife (Case Studies 2.12 and 2.13). Many families had not officially split, but were living separately in the same large multi-storey house when the earthquake happened. They are now fighting over the land, the housing grant money, or how to rebuild. For example, RP Sainju from Bhaktapur Municipality had not started reconstruction because of a dispute with his brother. He explained, "Chhutiyeko pariwar le ta ghar banairako chha." (The families that have separated are rebuilding.)

Key interviewees in Bhaktapur all pointed to family disputes as a key factor – if not the key factor – delaying reconstruction in the core urban areas of the mu-





- 1. Ongoing construction in Bhaktapur, November 2019. Photo: Prabhat R Jha
- 2. Aurvedic medicine shop in earthquake-damaged house in Bhaktapur, November 2019. Photo: Pallavi Paval

nicipality. Outside core urban areas, family disputes were sometimes found to impact reconstruction. In Suryabinayak, researchers met with ten families who had all been living on their ancestral land that had originally belonged to their great-grandfather who had passed away a long time ago. Due to existing family disputes, the land had not been formally divided among the families. All of them now continue to live in temporary shelters, unable to rebuild.

Disputes between neighbors or difficulties coordinating the demolition of adjoined buildings were also frequently reported.

### Landownership patterns and tenancy rights were another major factor slowing down urban reconstruction in Bhaktapur.

In Bhaktapur, tenants are known as *mohi* and land-owners as *talsing*. Researchers found that many families falling behind in housing recovery are *mohi* who do not legally own land, and hence, are facing obstacles accessing rebuilding grants and getting permission to build on the land where they have lived for generations. Some of the *mohi* families were expecting an initiative from the local government to solve their problem. Ms. K Nepali, for example, said

## Case Study 2.12: A mason who has not yet rebuilt his house due to insufficient financial resources and a family dispute

Dil Bahadur (age 40) from Bhaktapur Municipality is a mason by profession, earning a small income. The house he lived in at the time of the earthquake got destroyed and was declared un-liveable. As the land was in his wife's name, she was the one enlisted as beneficiary for the housing grant. With his wife's permission, Dil tried to rebuild a house on some other land they owned. He used the first tranche of the housing grant she received to demolish the old damaged house. Demolition was costly because their house was in a narrow lane. He

also took a loan of NPR 3,000,000 (USD 25,000) from a local cooperative. He says he spent NPR 800,000 – 900,000 (USD 6,650- 7,500) on construction so far, but could not complete building a new house because his loan has been discontinued. Dil claims his wife, who was a witness for the loan, did not trust him to repay the loan. He now lives in a temporary shelter near the construction site while his wife and two children live in a rented house supported by her family.

### Case Study 2.13: A family of three brothers finds it difficult to rebuild in Bhaktapur

Narayan Bahadur's house in Bhaktapur Municipality was badly damaged during the earthquake. His family sought shelter in a nearby school and later shifted to rented house. Before the earthquake, his house had four storeys and was made of mud and bricks. He used to live there with his two brothers and their families. All three brothers registered for the housing reconstruction grant and received the first tranche, but they have not yet been able to rebuild. They removed the two upper floors of their house and Narayan's brothers continue to live in the building, even though it

was declared unsafe. He and his own family live in rented accommodation.

The family has not yet rebuilt because they have no regular source of income. Narayan worries about taking a loan, as he may not be able to repay it. He fears losing his ancestral home. "Bhako euta ghar pani bank le khaidiyo bhane ke garne." (If the bank takes the one house we have then what should we do?) He also worries about losing or having to sell a small plot of land they own next to their old house.

she was asked to leave the land their family had lived on for 50 years by the owner after the earthquake. She said, "Back then, one's word was enough. Now, we need papers." Nepali's family took the first grant tranche, but failed to rebuild as they were not owners of the land where they had lived. As daily wage workers, they currently live in a temporary shelter made from galvanized sheets on public land next to a highway. The family reportedly also did not qualify for a livestock grant from the Red Cross, as they did not possess land ownership documents. She had informed the ward chairperson about her problem, but it had not been resolved until the time of the researchers' visit.

Strict, and sometimes conflicting, building codes enforced by municipality, Department of Archaeology, and the NRA made urban reconstruction more difficult in heritage areas – as do small land plots.

Building codes in heritage areas is a unique challenge in Bhaktapur. In Bhaktapur, houses in heritage sites need to get their designs approved by both the Department of Archaeology (DoA) and the municipality, which affected households saw as a lengthy, time-consuming, and difficult process. Mr. Baidya, a 59-year-old housing reconstruction grant beneficiary who lives near the Bhaktapur Durbar Square, said that his building design had not been approved because of the basement, which already existed in his old house, but is now no longer allowed. He asked, "If my old home in the heritage area already had an underground floor, why can't I build the same in my new house?" A wom-

an near another heritage square had the same complaint, saying that her land plot is small and without a basement, they lack space to house the family. A man who managed to rebuild said he did not receive a completion certificate because he did not build the house with a wooden slope roof toward the front facade, which is required in heritage areas.

Following DoA requirements for heritage areas increases building costs. While those rebuilding in heritage areas received wood and traditional bricks at discounted rates, people thoughts this was not nearly enough to cover the high costs for traditional windows and other heritage features. Many families were frustrated by strict municipality and DoA building codes and hoped for more leniency and freedom to build as they wished. A lead engineer in Bhaktapur, however, saw this as a sign that people had forgotten about the disaster and cared more about lowering building costs than long-term safety – despite the fact that many people lost their lives in collapsed buildings in Bhaktapur during the earthquake.

Skilled manpower has also been in shortage in heritage areas. An engineer in Bhaktapur lamented that construction companies and contractors lack an understanding of how to build heritage houses and lack specially trained manpower and skilled traditional masons. There have been disagreements and confusion about whether buildings should rebuilt according to their original design before the 1934 earthquake in Nepal, or based on their condition before the more recent earthquake.



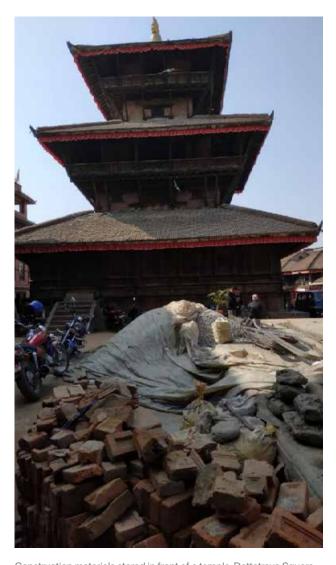


- 1. Earthquake-damaged houses in Bhaktapur, November 2019. Photo: Lena Michaels
- 2. Shops in traditional, partially damaged buildings in Bhaktapur Municipality, November 2019. Photo: Kiran Bhattarai

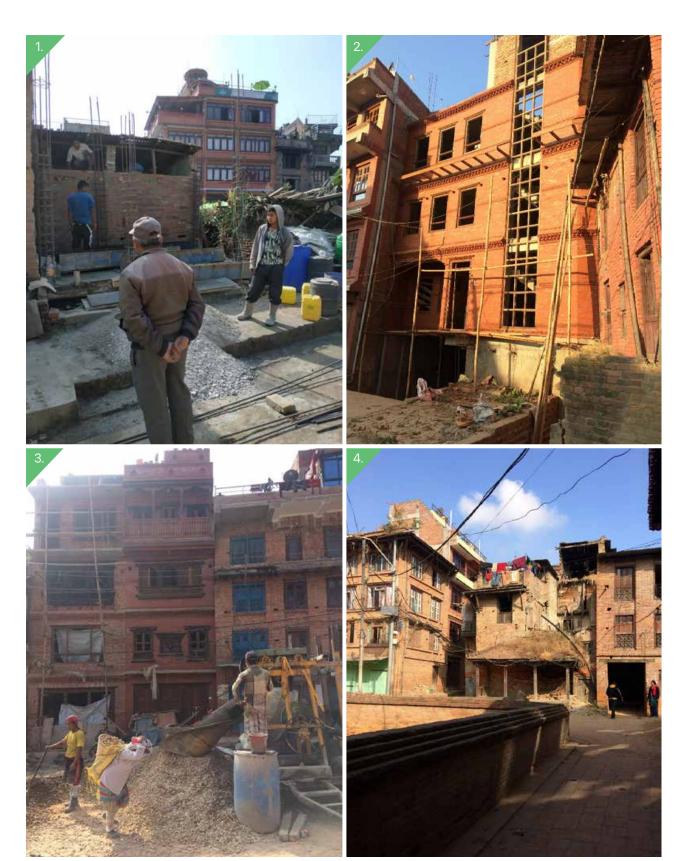
### The urban poor remain in volatile housing situations.

While some or all of the challenges specific to urban areas affect anyone trying to rebuild there, economically better-off households have found other options, such as rebuilding on land outside the core urban or heritage areas, or renting. Many of them reportedly built or repaired houses outside the housing grant system – and therefore do not show up among official completion numbers. Those with multiple land plots have also been able to finance higher reconstruction costs in urban areas by selling land, as land is very valuable in urban areas inside the Kathmandu Valley and in bazaar towns (Chapter 4.1.4).

The urban poor, however, lack those options and many of them have become particularly vulnerable and stuck in temporary shelters or badly damaged buildings (Case Study 2.14). Across Bhaktapur urban areas, researchers met many households who had not yet begun rebuilding or repairing their houses and lived in temporary shelters, damaged houses, or even narrow alleys between buildings. For example, Mr. Chwaal and his family of ten have continued living in their damaged old house in Bhaktapur because he does not have enough money to rebuild. He had built that house selling land, he said, but no longer has any other assets to sell to finance rebuilding. He said, "I have no option other than to continue staying in this badly damaged house now." For Mr. Chwaal, building codes imposed by the NRA and municipality only represented additional costs and were a source of additional frustration.



Construction materials stored in front of a temple, Dattatreya Square, Bhaktapur, November 2019. Photo: Lena Michaels



- 1. Construction on a small plot of land in Bhaktapur Municipality, Bhaktapur, November 2019. Photo: Lena Michaels
- $2. \ Use of traditional \ brick front in house under construction in Bhaktapur Municipality, November 2019. \ Photo: Kiran Bhattarai$
- 3. Ongoing construction in Bhaktapur, November 2019. Photo: Pallavi Payal
- 4. An earthquake-damaged house in Bhaktapur, November 2019. Photo: Pallavi Payal

### Case Study 2.14: Urban reconstruction creates new vulnerabilities

Ms. Joshi (age 62) in Bhaktapur municipality lives in a house that was declared unsafe for living by NRA engineers after the earthquake. She currently lives in a two-room house with her three sons and husband. The house had five rooms, but had to be partially demolished to make it liveable after the earthquake. The family lived in a shelter for three and a half months. With the help of her son's friends, she cleaned the house and demolished the top two storeys and started living there. However, she does not feel safe. She said, "We can feel the house shake when we walk on the top floor. It is scary at night, but we do not have any other option."

The family took the first tranche of earthquake grant, but could not start rebuilding because their financial condition did not support it. Joshi's oldest son is an astrologer following a family tradition handed down to him by his father. Joshi explained that his work has also been affected after the earth-

quake. He uses a part of one room for his work, but very few people come to him for readings. The second son is a salesperson at a shop in the airport.

Joshi said their total income is not enough to rebuild and they do not have any other land to sell. They have not tried taking a loan because they do not have any other property. She said that the family often discussed selling the existing land, but they are not sure where they could go afterwards. Her husband recently fractured his leg, and has been on bed rest for the last four months.

Around the time of the earthquake, they were planning the oldest son's wedding, but talks ended after the earthquake. He remains unmarried. Joshi said, "My sons are not able to get married because we do not have a proper house. The earthquake led to multiple problems in my family." She said that she is not sure about the future, but is somehow managing the present.

## Case Study 2.15: A Dalit man unable to rebuild, lives in a make-shift shelter in an alley

Shiva is a mason who lives in the Dalit settlement of Bhaktapur Municipality. His house was damaged in the earthquake and he received the first tranche of the housing grant, NPR 50,000 (USD 415). Due to his lack of income and property, he and his family of five have not yet been able to demolish the old house and build a new one. He and his sons are masons, but have received no trainings since the earthquake.

His old house was built between other houses. In order for him to be able to rebuild, his neighbors must also rebuild, but they are unable to do so because they also do not have enough money.

Shiva's house is too badly damaged to live in. He and his family moved to a temporary shelter immediately after the earthquake and later to a friend's house for a brief period. Since they could not stay at the friend's place long-term, Shiva moved to a narrow lane near his old house, while his family members spread out to different places. The height of the alleyway 'room' he inhabits is half of Shiva's height, and he cooks, washes, and sleeps in that the tiny place.



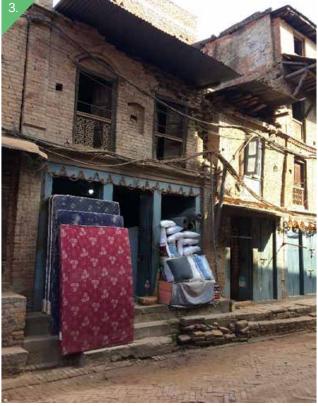
Shelter in a passageway in Bhaktapur. The owner, a Dalit man, is unable to reconstruct due to lack of finance, November 2019. Photo: Pallavi Paval

Dalit families were particularly badly affected, lacking property to access loans and money to rebuild. Jasmina, a young Dalit tailor in Bhaktapur, was living in an old, badly damaged house. Her family had removed the upper floors with the money they received from the first tranche of the housing reconstruction grant. They now live in two rooms as a family of eight people, including small children and an 80-year old grandmother. She explained that her family are mostly farmers and do not have enough land or property to finance rebuilding.

Purna Devi, an old Dalit woman in the same settlement in Bhaktapur municipality recounted similar experiences. Her six-storey house was now reduced to two and still showed damages. She said she feels safe staying there, but the structure looked unsafe. Other Dalit families could not return to their partially damaged houses and live in even worse conditions in shelters or make-shift accommodation (Case Study 2.15).







- 1. Debris from earthquake-damaged houses and a newly built multi-story house in Bhaktapur, November 2019. Photo: Lena Michaels
- 2. Ongoing construction in Bhaktapur, November 2019. Photo: Prabhat R Jha
- 3. Aurvedic medicine shop in earthquake-damaged house in Bhaktapur, November 2019. Photo: Pallavi Payal

## Integrated efforts to rebuild and regenerate urban settlements seem to be missing.

While some additional funds were available for rebuilding in heritage areas, few knew about these and most people complained that the onus was on them to cover additional costs for rebuilding heritage houses with elaborate windows, traditional brick fronts, and slanted roofs. Local governments, political party representatives, and communities felt there were not enough efforts to tailor assistance to urban areas to address specific needs there. As a member of the Bhaktapur DDRC put it, "having a uniform policy for

disparate locations" is not suitable for urban areas. Researchers did not come across larger schemes to rebuild urban settlements or preserve non-religious, non-public heritage buildings.

Political parties did not seem to mobilize in order to assist people in urban settlements with raising their concerns in a more organized way, and instead, put blame on the NRA and the central government. In Bhaktapur, the municipality was preoccupied with heritage reconstruction and saw housing reconstruction primarily as the NRA's cash grant process.

### 2.6 Shelters

### **Key findings: Those still living in shelters**

Fewer people were living in temporary shelters during IRM-5 than in IRM-4. While the shares of people still in temporary shelters had noticeably decreased by IRM-5 (November 2019), some earthquake-affected people continued to live in temporary or semi-temporary shelters across all four districts visited. These shelters consisted of

temporary housing structures made from salvaged tin and wood.

Most of those still in shelters were observed to be from marginalized and vulnerable groups. The main reason for continuing to live in temporary shelters was insufficient financial resources to rebuild, or lack of land.

The number of people living in temporary shelters was smaller than in IRM-4, but there were still people stuck in temporary shelters in all districts visited.

With progress in reconstruction and repairs of old houses (Chapters 2.1 and 2.4), the numbers of people still living in temporary shelters had reduced visibly in settlements visited. In IRM-4 (April 2017), the use of shelters was still very common, especially in rural settlements. By IRM-5 (November 2019), the majority had moved into proper houses.<sup>49</sup> However, in all rural municipalities/municipalities visited, researchers found at least half a dozen individuals or families

still living in temporary shelters due to earthquake impacts and often heard of many more. Those who were still living in temporary shelters did so mainly due to lack of funds to rebuild, or because they did not own land on which to rebuild. Temporary shelters tended to be constructed of bamboo or wooden frames, and tin roofs and walls. They were pieced together using material salvaged from damaged houses or bought new. The researchers observed very few cases of people still living in tents or under tarpaulins. Temporary shelters were often still used for secondary purposes, such as cooking, storage, livestock, or additional living space (Chapter 2.2).

Those who have not rebuilt tend to be from poor and marginalized groups. Dalits and older single women, in particular, have fallen further behind in their recovery.

Most people still living in temporary shelters were found to have remained there for the following rea-

<sup>49</sup> According to the IRM survey, the shares of people in temporary shelters had reduced from 29% in IRM-4 (April 2017), to 4% in IRM-5 (October 2019). See, The Asia Foundation and Interdisciplinary Analysts (2020). Aid and Recovery in Post-Earthquake Nepal: Independent Impacts and Recovery Monitoring Phase 5 – Quantitative Survey (September-October 2019). Kathmandu: The Asia Foundation





- 1. CGI earthquake shelter still in use, Suryabinayak Municipality, Bhaktapur, November 2019. Photo: Pallavi Payal
- 2. Women in front of CGI shelters in Suryabinayak Municipality, Bhaktapur, November 2019. Photo: Lena Michaels

sons: lack of finance, exclusion from beneficiary lists, lack of land certification, or displacement from original land due to geohazards. Single women, Dalits, tenant farmers, and the displaced were disproportionately affected by these factors, making their housing recovery more difficult.

Other vulnerable groups, such as the urban poor, households in remote areas, elderly, and other historically marginalized groups, were also typically among those who have been unable to rebuild and thus, remain in temporary shelters. Accessing government grants and loans was harder for these groups, as they did not have land in their name or were more likely not to have a regular job or networks that could assist in accessing the grants or loans (Chapter 3.1). Like

others, a family in Chautara, Sindhupalchok, was still living in a shelter as they were excluded from the beneficiary list. They explained, "Our house was completely destroyed in the earthquake and we were repeatedly left out of the beneficiaries list. So, we did not get cash to rebuild a house and we do not have enough money to rebuild." Kanchhi Nepali from Suryabinayak Municipality does not have land in her own name. After the earthquakes, a road was opened through the land on which her damaged house was built. She has since made a small temporary shelter on public land. Those who have been displaced and are squatting on public land continue to live in temporary shelters, and are unable to start rebuilding sue to confusion over the land, according to displaced man from Gaihirigaun in Gorkha.

## Case study 2.16: A single woman is unable to claim financial support without land certificate

Bishnu, 60, is a single woman living in a temporary house in a village Suryabinayak Municipality. She is not a beneficiary of the housing reconstruction grant scheme, even though her house was completely destroyed in the earthquake. She is missing the land registration certificate needed to enlist as a beneficiary. Her husband left the family many years ago. Bishnu knows that her husband mortgaged the land, but is unaware of his current whereabouts.

After the earthquake, Bishnu tried to register for

the housing grant and also tried to get NPR 6,000 (USD 50) allotted for animal husbandry, but she could not receive either without the land registration number.

Five years after the earthquake, Bishnu still lives in a temporary house made of materials from the old house, and depends on support from her community. She lives there with her 30-year-old son who had taken a loan of NPR 700,000 (USD 5,800) to go abroad. He has since returned and is currently unemployed.

### Case study 2.17: A woman still lives in a bamboo shelter

Saraswoti, 56, from Molung Rural Municipality, has not yet built a new house following the collapse of her house in the earthquake. She is still living in the temporary shelter she built in the immediate aftermath of the earthquake five years ago, made mainly of bamboo. Although her name was registered on the list of housing grant beneficiaries, her husband took the first tranche of the money and moved to Kathmandu where he remarried, leaving her behind. As the land she lives on is still in her husband's name, she is not eligible to receive a grant from any bank, so has no choice but to continue living in the bamboo shelter.



Saraswoti in front of her temporary shelter in Okhaldhunga, November 2019. Photo: Dewan Rai

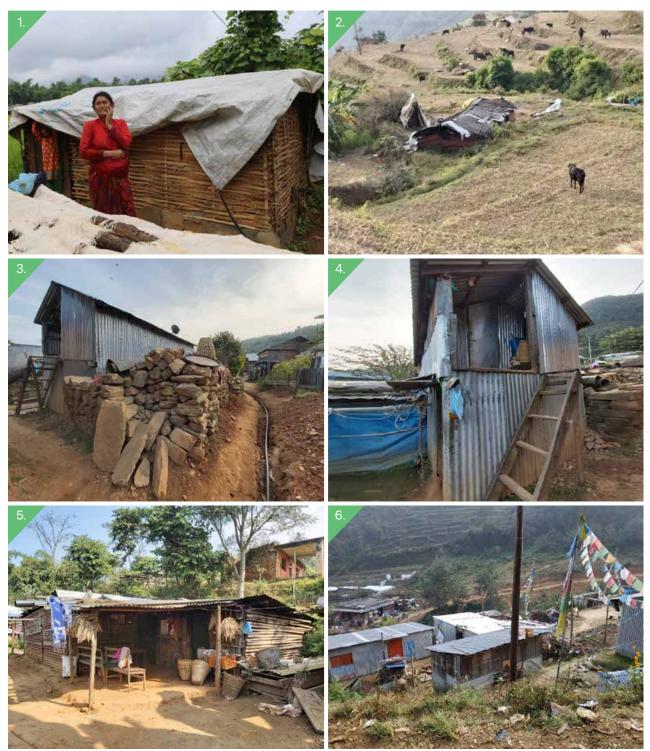
### Case Study 2.18: With no government grant, an old woman cannot afford to rebuild her house

Sukalaxmi, 83, lives in Suryabinayak Municipality. Her house on top of a hill was destroyed in the earthquakes, after which she moved down the hill, along with many others from her settlement. The land she has been living on is owned and lent to her by her brother-in-law. Her son received a grant, but chose not to invest it towards rebuilding the

old family home, as his mother lives alone in their village. He made his mother a temporary shelter using material salvaged from the old house. It is a one-room structure with water, electricity, and gas cooking. Sukalaxmi reasoned, "I will die soon, so there is no need to build me a house."

Dalits, in particular, and other groups with little to no landholdings, such as tenant farmers in Bhaktapur (mohi), continue to show the slowest progress and are comparatively more likely to live in unsafe housing on unsafe land or in inadequate temporary shelters - primarily due to their lack of land and financial resources. Dalits were also more likely to be excluded from access to resources, such as community forests, which provide materials for reconstruction. Although they did not feel they had suffered from explicit discrimination, only very few received special help as particularly vulnerable groups (Chapter 3.3). In Rampur and Katunje in Okhaldhunga, researchers met many Dalit households still living in vulnerable housing conditions, primarily in self-con-

structed temporary shelters. This was because they had been unable to access the housing grants – being excluded from housing grant beneficiary lists or declared ineligible for retrofitting support, even when their houses was badly damaged – and lacking funds to rebuild. Higher caste families in the same areas, on the other hand, had received multiple grants per family and rebuilt successfully. In the other districts too, researchers observed that Dalits were overrepresented among those still in shelters nearly five years after the earthquake. Previous IRM research had already pointed to the slower recovery of Dalits and their increased vulnerability after the earthquakes.



- 1. A Dalit single woman in front of her bamboo shelter in Okhaldhunga. 2017, Photo: Prabhat R Jha
- 2. Earthquake shelter still in use, Barpak, Gorkha, November 2019. Photo: Manasi Prasai
- $3. \quad \text{CGI shelter and stones salvaged from the collapsed house in Tanglichok, Gorkha, November 2019. Photo: Manasi Prasain and Stones salvaged from the collapsed house in Tanglichok, Gorkha, November 2019. Photo: Manasi Prasain and Stones salvaged from the collapsed house in Tanglichok, Gorkha, November 2019. Photo: Manasi Prasain and Stones salvaged from the collapsed house in Tanglichok, Gorkha, November 2019. Photo: Manasi Prasain and Stones salvaged from the collapsed house in Tanglichok, Gorkha, November 2019. Photo: Manasi Prasain and Stones salvaged from the collapsed house in Tanglichok, Gorkha, November 2019. Photo: Manasi Prasain and Stones salvaged from the collapsed house in Tanglichok, Gorkha, November 2019. Photo: Manasi Prasain and Stones salvaged from the collapsed house in Tanglichok, Gorkha, November 2019. Photo: Manasi Prasain and Stones salvaged from the collapsed house in Tanglichok, Gorkha, November 2019. Photo: Manasi Prasain and Stones salvaged from the collapsed house in Tanglichok, Gorkha, November 2019. Photo: Manasi Prasain and Stones salvaged from the Collapsed from$
- 4. Entrance to a CGI shelter in Tanglichok, Gorkha, November 2019. Photo: Manasi Prasai
- 5. Bamboo and CGI shelter in Gorkha, November 2019. Photo: Manasi Prasai
- 6. CGI shelters in Suryabinayak Municipality, Bhaktapur, November 2019. Photo: Lena Michaels



Photo: Manasi Prasai

This chapter discusses government grant schemes for housing reconstruction, retrofitting, the most vulnerable, and the displaced or landless. It focuses on the distribution of, and access to, these grants – to better understand who has and has not received them? It also examines how coordination, information, and access to technical assistance have impacted the implementation of these grant schemes. This chapter describes the roles and perceptions of local governments, who have been given some responsi-

bilities with regards to implementing and coordinating grant schemes. When local bodies assumed office under a new federal system in 2017, after almost twenty years without elected local bodies, the NRA had already been implementing post-earthquake reconstruction and recovery activities for two years. It took almost another two years, until the beginning of 2019, for the NRA to designate and hand over a series of reconstruction-related responsibilities to local governments.

#### 3.1 Housing grants

#### **Key findings: Housing grants**

Access to housing grants has improved over time. Housing grants (for rebuilding and retrofitting) have been the primary form of financial assistance to earthquake-affected households in rebuilding. Not only have more people received their grants, but they have also found it easier to access grants, largely due to better information, faster distribution, and increased presence of bank branches at the local level. The presence of local governments has also helped ease access with local representatives acting as an important bridge between the NRA and beneficiaries. Those in very remote areas, however, still had to travel far to receive their grants.

#### Some earthquake survivors remained excluded from housing grant beneficiary lists.

Wrongful exclusion was often due to mistakes in initial assessments, technical glitches, and lack of land or citizenship documentation. Frustration about this was expressed by respondents who did not understand why they still remained excluded nearly five years later, and also by local government representatives unable to help beyond registering grievance cases. The researchers also observed some complaints about 'inflation of beneficiary lists' and wrongful inclusion.

There has been progress addressing grievances through reassessments, but the process lacked transparency. Filing grievances had become easier for people after 2017, with facilitation by new local government representatives. Yet, communities and local governments thought the grievance process was not transparent. Many people were still unsure about the outcome of their grievances and local governments were particularly dissatisfied with their lack of decision-making role in grievance process and inadequate information on already filed cases.

Most people had filed grievances because they were left out from beneficiary lists despite suffering housing damages, but some complained to receive the 'full' housing reconstruction grant instead of retrofitting support.

People were satisfied with the housing grant scheme, but remained dissatisfied with the amounts provided. Given the high rebuilding costs, overall grant amounts were considered insufficient to help people recover financially from the impacts of the earthquake. The retrofitting grant in particular was seen as too small and inadequate. Many complained about the division of grants into multiple installments, each of them insufficient to cover expenses necessary to qualify for the next installment.

Information sources had diversified and awareness of grant requirements had improved, but gaps remained. Radio, engineers, and local government officials emerged as new key information sources. Information-sharing on retrofitting, approved building designs, and access to low-interest loans, remained inadequate.

Housing grants were the main type of assistance earthquake-affected households received; the majority received grants for rebuilding and only a small share received retrofitting support.

The GoN, with donor support, has provided housing grants to those needing to rebuild or repair their houses damaged by the earthquakes. The Rural Housing Reconstruction Program (RHRP), a multi-donor trust fund between the Government of Nepal, the World Bank, and four donor partners-United States Agency for International Development (USAID), UK Department for International Development (DFID), Swiss Agency for Development and Cooperation (SDC), and Canada Department of Foreign Affairs, Trade and Development (DFATD)is the main mechanism through which resources were distributed to those whose homes were destroyed or badly damaged in the earthquake.50 This program emphasizes owner-driven reconstruction and to 'build back better' by supporting those who are building safer, earthquake-resistant houses. Housing grant beneficiaries were identified on the basis of multiple rounds of damage assessments, which were heavily criticized by households and local stakeholders, who complained that eligible beneficiaries were left out.<sup>51</sup> To address this, a grievance process was set

up to allow people to file complaints in order to be added to beneficiary lists (Chapter 3.1.2).

The NRA, set up to oversee post-earthquake reconstruction, manages distribution of the housing grants. Those declared eligible sign beneficiary agreements, and then receive their grant in installments, or 'tranches.' There are two types of housing grants: reconstruction grants to rebuild new houses, and retrofitting grants to make partially damaged houses structurally stronger and safer. The housing reconstruction grant of NPR 300,000 (USD 2,500) is provided in three tranches: NPR 50,000 (USD 415) upon signing a beneficiary agreement, NPR 150,000 (USD 1,245) after completing the foundation, and NPR 100,000 (USD 830) after completing the walls. The retrofitting grant of NRP 100,000 (USD 830) are provided in two instalments of NPR 50,000 (USD 415) each. The grants are provided through dummy accounts, created in the nearest branches of commercial banks with which NRA did prior agreements.

Housing grants have been the primary form of financial assistance that earthquake-affected households received for the reconstruction of their houses. Previous IRM reports have discussed the damage assessments as well as grant agreement and distribution processes between 2015 and 2017, in detail.<sup>52</sup> During IRM-4 (early 2017), distribution of the first tranche

<sup>50</sup> https://www.nepalhousingreconstruction.org/

<sup>51</sup> The Asia Foundation and Democracy Resource Center Nepal (2017). Aid and Recovery in Post-Earthquake Nepal: Independent Impacts and Recovery Monitoring Phase 3 – Qualitative Field Monitoring (September 2016). Kathmandu and Bangkok: The Asia Foundation

 $<sup>52\,</sup>$  All reports can be accessed at https://asiafoundation.org/where-wework/nepal/irm-project/

of the housing reconstruction grant had largely been completed, but many had not yet received their subsequent installments – even if they had already rebuilt. By IRM-5 (late-2019), there had been substantial progress in the distribution of grants and in rebuilding (Chapter 2.1), but government assistance still remained focused on the distribution of housing grants (see below).

The following sections discuss the grants process for both reconstruction and retrofitting grants. Most findings, however, relate to reconstruction grants, which many more people have received than the retrofitting grants. Findings about the latter are highlighted separately where relevant. Researchers only met one person who successfully retrofitted their house using the retrofitting grant, but talked to more than a dozen households who had been declared eligible for retrofitting support.

#### **3.1.1 Access**

## Access to the housing grants has improved since 2017.

In IRM-4 (April 2017), some people still faced difficulties accessing the first installment of the housing reconstruction grant. There were delays in the distribution of subsequent installments as well as confusion about conditions and requirements to receive the second and third installments.<sup>53</sup> By IRM-5 (November 2019), nearly all people had received the first installment and the majority had received their second and third installments. This indicates good progress in reconstruction grant distribution and rebuilding – although the same was not evident in retrofitting (Chapter 2.1).

In general, access to the grants became both easier and faster than in 2016-2017, when many still faced administrative and logistical difficulties accessing the bank accounts where their grant money had been deposited, as well as long delays receiving tranches.54 The process had also become clearer to beneficiaries. While previously, many complained about being unsure of requirements for receiving a grant, nearly all of those interviewed in IRM-5 seemed confident in the process and what they needed to do to receive their grant. Overall, beneficiaries had few complaints about access. Those who were declared eligible did not report any issues accessing their first installments and those who fulfilled building requirements said they could easily access subsequent installments. Only those who had extensive housing damage, but were not declared eligible, continued to face difficulties and have major complaints about accessing the grant (see below). Those who did not comply with building codes, also did not receive all tranches of the grant, but this was due to lack of awareness of technical requirements, and limited or inadequate technical assistance, rather than a lack of information on the process of accessing the grants (Chapter 3.3 and 3.4).

## The presence of local governments has helped ease access to the housing grants.

Between November 2018 and February 2019 the NRA handed over selected earthquake reconstruction-related responsibilities to newly elected local governments through MoUs. Under these MoUs, the primary roles of local governments were to support registering grievances, provide information to beneficiaries, and manage and coordinate with the NRA-deployed engineers and other technical employees.

Consistent with DRCN's previous findings55, respondents from IRM-5 overwhelmingly thought that the presence of local governments had made it easier to access technical support and the housing grants, which helped speed up the reconstruction process. Local governments managed and coordinated with NRA engineers deployed at the municipal and ward levels, and also helped ensure they responded to people's questions and needs for technical supervision as quickly as possible. Other contributors to improved coordination included fortnightly meetings at GMA-LI and DLPIU, where data from all wards was collated, and regular monthly meetings. New information was communicated by ward offices through notice boards, as well as verbally, through social mobilizers, masons, local TV channels, and FM radio stations. Overall, having elected local bodies increased and enhanced beneficiaries' access to earthquake reconstruction related services. "Initially we had to walk to the district headquarters for every small issue, but now we can just write a letter at the ward office," a beneficiary in Chautara-Sangachokgadhi, Sindhupalchok, said, of improved access to request support and file complaints at the ward office.

<sup>53</sup> The Asia Foundation and Democracy Resource Center Nepal (2017). Aid and Recovery in Post-Earthquake Nepal: Independent Impacts and Recovery Monitoring Phase 4 – Qualitative Field Monitoring (April 2017). Kathmandu and Bangkok: The Asia Foundation, pp. 39-54

<sup>54</sup> The Asia Foundation and Democracy Resource Center Nepal (2017). Aid and Recovery in Post-Earthquake Nepal: Independent Impacts and Recovery Monitoring Phase 4 – Qualitative Field Monitoring (April 2017). Kathmandu and Bangkok: The Asia Foundation, pp.39-53



- 1. A man in front of his rebuilt house in Okhaldhunga, 2019. Photo by Dewan Rai
- 2. A rebuilt two-room house with shed on the side, Okhaldhunga, 2019. Photo by Dewan Rai
- 3. A woman in front of her rebuilt house in Okhaldhunga, 2019. Photo by Dewan Rai
- 4. A woman in front of her two-room house in Okhaldhunga, 2019. Photo by Dewan Rai

#### Those in remote areas still had to travel far to access their grants, despite local bank branches in municipalities.

As the grants were being distributed through bank branches, people had to travel to the nearest branch to receive their grant funds. Those close to district headquarters always found it easier to access bank branches than those in more remote areas who had to travel hours, if not days, to the nearest bank branch, even after mobile branches had opened in some locations.<sup>56</sup> Since 2017, more local branches had opened at the local level, as it had become mandatory for each municipality to have a bank.<sup>57</sup> This made access easier for many who previously had to travel beyond their municipality to receive their grant. For example, people in Lisankhu Pakhar Rural Municipality, in Sindhupalchok, said that a commercial bank branch opened at the rural municipality in 2018, and the beneficiaries could now access housing grants through that branch.

However, many continued to have to travel far to access banks and receive their grant. In Okhaldhunga, district-level government officials pointed out that beneficiaries, such as those from Likhu Rural Municipality in Okhaldhunga, had to walk up to four days to reach the headquarters to access banks. The distance and time taken to access the grant involved additional expenses for beneficiaries. In Gorkha, those from Chum Nubri in Gandaki Rural Municipality also had to travel multiple days each way to access banks in the district headquarter. Here too, there was a cost associated with an overnight stay in Gorkha bazaar, which was not insignificant in comparison to the tranche available. It would cost close to 10 percent of the first tranche of NPR 50,000 (USD 415) for people from remote areas to access it. In Gorkha, commercial banks were not present in Gandaki Rural Municipality.

<sup>55</sup> DRCN (2019). "The Roles of Local Governments in Disaster Management and Earthquake Reconstruction". April 2019. Available at: https://www.democracyresource.org/reports/the-roles-of-local-governments-in-disaster-management-and-earthquake-reconstruction/

## 3.1.2 Beneficiary lists and the grievance process

## There was progress addressing grievances through reassessments.

Those wrongly excluded from, or included in, housing grant beneficiary lists could file complaints to have their cases reviewed. Most formal complaints were in the form of grievances filed by those wanting to be added to beneficiary lists or to be 'upgraded' from retrofitting – perceived as a partial grant – to the 'full' housing grant. Formal complaints about those wrongly included were rare.

The NRA received a large number of grievances primarily due to mistakes in the initial damage assessment conducted in February 2016 under the Central

Bureau of Statistics to assess damage and identify housing grant beneficiaries. Previous IRM reports highlighted issues with damage assessments as observed at the local level, and the fact that both technical issues (leading to data loss) as well as mistakes (leaving out houses or whole settlements, or data entry mistakes) led to the exclusion of many genuine earthquake victims.<sup>58</sup> By IRM-4 (April 2017), most grievances remained unresolved and people did not yet know the results of the grievance process.

By IRM-5 (November 2019), many more households had been added to beneficiary lists, suggesting that a large number of grievances were addressed (in September 2017 there were 752,078 eligible beneficiaries, but in November 2019 there were 820,610 – see Table 2.1).<sup>59</sup> In 2018-19, multiple re-assessments were done to verify grievances and

Table	3 1. (	Grievances	s in d	listricts	visited <sup>60</sup>
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District	Date	No. of grievances registered	No. of grievances addressed	No. of grievances remaining
Overall (all districts)	November 2019	368,963	208,195	160,768
Overall (all districts)	August 2020	380,241	240,429	139,812
Gorkha	November 2020	19,038	12,485	6,553
Gorkha	August 2020	19,038	13,000	6,038
Okhaldhunga	November 2019	8,019	6,810	1,209
Okhaldhunga	August 2020	8,019	6,810	1,209
Sindhupalchok	November 2019	23,961	12,390	11,571
Sindhupalchok	August 2020	23,961	12,390	11,571
Bhaktapur	November 2019	8,021	6,651	1,370
Bhaktapur	August 2020	8,021	8,021	0

<sup>56</sup> The Asia Foundation and Democracy Resource Center Nepal (2016). Aid and Recovery in Post-Earthquake Nepal: Independent Impacts and Recovery Monitoring Phase 2 – Qualitative Field Monitoring (February and March 2016). Kathmandu and Bangkok: The Asia Foundation. And: The Asia Foundation and Democracy Resource Center Nepal (2017). Aid and Recovery in Post-Earthquake Nepal: Independent Impacts and Recovery Monitoring Phase 3 – Qualitative Field Monitoring (September 2016). Kathmandu and Bangkok: The Asia Foundation

<sup>57</sup> With each municipality and rural municipality required to have access to banking, commercial banks have been expanding their branches across the country since 2017.

<sup>58</sup> Errors in damage surveys also occurred when assessors missed out listing beneficiaries on a tablet device or did not list a beneficiary because a neighbor or relative misinformed them that the survivor had a

house elsewhere. See, The Asia Foundation and Democracy Resource Center Nepal (2016). Nepal Government Distribution of Earthquake Reconstruction Cash Grants for Private Houses – Independent Impacts and Recovery Monitoring Thematic Study (July-August 2016). Kathmandu and Bangkok: The Asia Foundation And: The Asia Foundation and Democracy Resource Center Nepal (2017). Aid and Recovery in Post-Earthquake Nepal: Independent Impacts and Recovery Monitoring Phase 3 – Qualitative Field Monitoring (September 2016). Kathmandu and Bangkok: The Asia Foundation

<sup>59 2017</sup> data is from MoFALD CLPIU (update, September 2017). 2019 data is from DLPIU-GMALI, CLPIU-GMALI and CLPIU-Building (25 November 2019).

<sup>60</sup> Data from CLPIU GMALI, accessed on 4 August 2020: http://clpiug-mali.gov.np/reconstruction-update

assess those left out in the earlier damage assessment. DRCN researchers found that reassessments were conducted in all four districts visited, with the last phase of reassessment conducted in Shrawan/Bhadra 2076 (July-September 2019). Through these, more people were added to the housing grant beneficiary lists, although not all grievances were approved and there were still 160,768 unresolved grievances as of November 2019 (Table 3.1). In each of the districts visited, researchers met at least a handful of beneficiaries who were added to the housing grant through the grievance process and even more who had filed grievances, but had not yet received the results of their complaint.

# Some beneficiaries on the retrofitting grant list filed grievances to be moved to the rebuilding grant.

In Okhaldhunga, beneficiaries did not think retrofitting would strengthen their homes; those who were on the beneficiary list for retrofitting were lobbying to be included in list for the 'full' reconstruction grant. Even in urban areas like Bhaktapur, those who had applied for the retrofitting grant now wished to be moved to the full earthquake rebuilding grant scheme. Ms. Gainsi from Suryabinayak, Bhaktapur, said that her house was included in the partially damaged and retrofitting grant, but she broke down the top floor and covered the roof with galvanized sheets. After that, she applied for the NPR 300,000 (USD 2,500) reconstruction grant because she believed that the house needs to be fully rebuilt, which many NRA engineers had also told her. Many were unsure about retrofitting, questioning its applicability to their house and its safety, therefore wanting to rebuild, rather than retrofit their house (Chapter 2.4). Technical assistance on retrofitting was found to be inadequate and do little to address people's concerns (Chapter 3.2.2).

#### The grievance process had become more localized after the 2017 local elections, making it easier for people to file grievances.

In IRM-4 (April 2017), people had expressed a preference for complaints to be addressed locally. Yet,

in the absence of local elected representatives, local government officials were simply collecting and forwarding complaints to NRA district offices, which then forwarded them to the central NRA office. The central NRA then passed those cases requiring further verification back to the districts, leading to long delays. Grievance management committees had been formed to facilitate the resolution of grievance cases, but these were mostly inactive in 2017.

By November 2019, the grievance process had changed due to the election of local governments in 2017, and the signing of MoUs between NRA and local governments, which give the latter some responsibilities with regards to the housing grant and grievances.<sup>61</sup> Now, people could file grievances in ward offices, which had formed ward-level grievance hearing committees under the leadership of the ward chair to verify the authenticity of grievances and forward genuine cases to the NRA.62 People interviewed agreed that it had become easier and faster to file grievances after the arrival of local governments, expressing high levels of satisfaction about being able to file grievances at the ward level, with the assistance of ward officials. Ward offices were actively working with posted NRA engineers, I/NGO engineers, social mobilizers, and masons to verify and forward grievances. According to a ward chair in Sndhupalchok, "We formed a grievance hearing committee in the ward. We identify and verify genuine beneficiaries and recommend them to the NRA through this committee."

#### Local government representatives were concerned about the exclusion of genuine earthquake victims from housing grant beneficiary lists and have helped people file grievances.

In most locations visited by DRCN, local representatives were proactive in ensuring that genuine beneficiaries were included in the beneficiary list, and in monitoring the enforcement of building codes and deadlines for tranches. Yet, local representatives commonly expressed concerns that some earth-

<sup>61</sup> Between November 2018 and February 2019, the NRA handed over selected earthquake reconstruction-related responsibilities to the newly elected local governments, through Memorandums of Understandings (MoU). The primary roles of local governments were to support registering grievances, provide information to beneficiaries, and manage and coordinate with the NRA-deployed engineers and other technical employees.

<sup>62</sup> The NRA had published a public notice asking the survivors who had been left out of the beneficiaries' list to apply for grievances in the ward office. The notice was disseminated in every municipality as well as the wards. Survivors had to submit an application form along with their proof of citizenship in the ward. Ward-level grievances hearing committees, under the leadership of the ward chair, would review and verify the applications and recommend them to the NRA. For example, it would review cases where people lack landownership documents, but had the testimony of neighbors to prove their long-term residence on the land. Similarly, they would review and verify grievances of those lacking citizenship documents but had five witnesses to attest to the authenticity of their grievances.

quake-affected households with major damages were still waiting to be included in the beneficiary lists and were therefore unable to rebuild. A local representative in a ward of Suryabinayak Municipality was concerned that 100 households in the ward, whose houses were damaged, were excluded from the list, and said the local government helped them file grievances and facilitated their later inclusion in the lists.

#### Local governments were dissatisfied with their roles in the grievance process and limited access to information.

Despite making it easier for people to file grievances at the ward level, the grievance process was still perceived as slow and lacking transparency by both local government representatives and those who filed grievances. Since applications had to be submitted to the NRA, many remained unsure of the status of their grievance, and local government officials were unable to access information on the cases they had forwarded. The chain of grievance redress terminates at the central headquarters of the NRA, from where the common response of 'no new action required' arrives back at the districts and wards. This frustrates the ability of social mobilizers and local representatives to effectively support or resolve grievance cases. Local government representatives routinely complained that they could do little about grievances, except forward the complaints to the NRA with recommendations, revealing that not much had changed compared to before, despite the involvement of ward offices, with the decision-making power and information on grievance cases remaining with the NRA and its district agencies.

#### Several households with housing damages remained excluded from beneficiary lists, even after filing grievances, making it harder for them to rebuild.

As described in Chapter 2.6, researchers met at least a dozen households in each district – and often more than that – who had been excluded from housing grants and not yet rebuilt. Many were excluded for reasons unclear to them – and to the researchers. Most of them were still living in temporary shelters and unsure about their future. Nearly all of the households left behind were marginalized people from Dalit or indigenous *janajati* communities, many of them single women. Some were landless or lacked land certification for land they had long lived on (see below). A Dalit man in Sunkoshi Rural Municipality, Okhaldhunga, was angered that his house

was removed from the beneficiary list after initially having been included in it, while others had received multiple grants per family. He said, "Some have managed to get more than one grant by having many family members get individual grants, such as father and son, while many Dalit families got nothing. The Chairperson's brother got two houses — one for himself, one for his son, even though they live together."

Some earthquake survivors with extensive housing damages had registered multiple grievances without being added to beneficiary lists (Case Study 3.1). Those who have been left out of the beneficiary list were found to be: a) marginalized people without access to information, or political or bureaucratic power; b) beneficiaries wrongly identified as having a house elsewhere; c) beneficiaries who were initially listed under the completely damaged category, but had since been removed for reasons unclear to the beneficiary; d) beneficiaries lacking proof of ownership of their house or land occupied by their house; and e) beneficiaries excluded because of technical glitches or data-input errors during the damage assessment process.

### Some people were unsure about the outcome of their grievances.

Researchers met with several households which had been excluded from beneficiary lists for reasons unclear to them - and to the researchers - and had filed grievances which remained unresolved to date. Many had filed multiple grievances, but still did not know whether or not they would eventually receive the grant (Case Study 3.1). Official NRA numbers, as of November 2019, show that many people were still waiting for their grievances to be resolved at the time of research (Table 3.1). Across districts, respondents were frustrated at being excluded and not knowing the results of their grievances. Some were in touch with ward officials and engineers, and hoped they could provide more clarity, but they also did not know the outcomes of grievances. While the process for resolving grievances has been made clearer since the time of research, many remain unsure of the outcome of their grievance until they receive information from the NRA, via NRA district offices and local governments.

Missing documentation was a major reason for exclusion from beneficiary lists and inability to file grievances, especially for the landless.

#### Case Study 3.1: Repeatedly left out of beneficiary lists

BB Tamang, aged 67, from Chautara in Sindhupalchok, had a three-storey house that was completely destroyed in the earthquake. His family, including his 98-year-old mother, still lives in a shelter. "Our house was completely destroyed from the earthquake and we were repeatedly left out of the beneficiary lists. So, we did not get a housing grant to build a house and we do not have enough money to construct a house on our own," he explained.

Tamang had registered his mother's name as a housing grant beneficiary, but her name was not included in the beneficiary list. He has since filed four grievances in her name. He also complained to the ward chair multiple times, but received no explanation. "You're a genuine survivor; let me try to understand why your name has been excluded," was the ward chair's reply.

Tamang decided to sell 10 *aanas* of land for which he received NPR 700,000 (USD 5,813), which he is using to build a two-room RCC house by himself. NRA engineers did not offer him any technical support, but he received some guidance from mobile masons deployed by JICA on how to build an earthquake-resistant house according to government building guidelines.

Despite government provisions for the landless, those lacking land documents were often excluded from beneficiary lists. DRCN researchers met a few people in each settlement who did not have land certificates and could therefore not access housing grant support. Gopal from Lisankhu Pakhar, Sindhupalchok, could not rebuild because he does not have a land certificate. He said, "The land where I constructed the basement of building up to the DPC level is owned by somebody else in the village. So, I could not complete the house despite having all the building materials ready." In Suryabinayak, a peri-urban area of Bhaktapur, about 200 out of 1,000 households were Tamang or Dalits living on rented land, often on tenure agreements dating back generations. As a result, they did not always have the permission to rebuild from the landowners, and some had even lost contact with them. The land they do own, up the

hill, is not safe for building, so they used it for agricultural purposes. In addition, many single women did not have land documentation for the land they had lived on, and where they wanted to rebuild, preventing them from accessing the land (Chapter 2.6).

This research found that the following groups of people commonly face difficulties due to landlessness.

In urban and semi-urban areas: landless renters whose domiciles were destroyed by the earthquakes; families who had sold their ground-floors to *guthi* trusts while continuing to live in the floors above and therefore lacked land titles to immediately begin reconstruction; joint families where each brother's family had been occupying separate floors in multi-storey buildings and now needed to build separate houses; families that had been occupying

## Case Study 3.2: "I don't feel safe living here." –Excluded from the beneficiary lists despite damage

N. Sarki from Sunkoshi Rural Municipality in Okhaldhunga does not feel safe in his house since the earthquakes. Some of the supporting beams inside his house were broken in the earthquake. "If that is not risky, then what is?" he asked. "I don't feel safe living here." Yet, he was not included in the housing grant beneficiary list as his house does

not appear to have damages from the outside. His house did not even get listed as partially damaged.

Sarki would like to rebuild a new house, but cannot afford to do so without financial help. So he has no choice but to continue living in his old house.



A woman with her grandson in Solukhumbu, 2016. Photo by Prabhat R Jha

guthi and other properties held in trust, or government and other public lands; and tenant farmers (*mohi*) who had lived and farmed on land for generations without official documentation of ownership.

In rural areas: households that had never been formally registered with the state or possessed no documentation of land-ownership or of division of property through generations; low-income families generationally dependent upon the patronage of landowners and therefore without documentation to indicate ownership of damaged houses which they had been occupying; and people living in an area made geologically vulnerable and therefore unsafe by the earthquakes or subsequent landslides.

Those lacking land certificates often said they did not file grievances as they did not have the documents needed to receive the grants. In theory, those who had occupied the same land for generations can file grievances to be included in the beneficiary lists with the testimony of neighbors and local representatives. In practice, however, many people who were in this situation did not claim housing grants through grievances due to their arrangements with landowners, or due the fact that landownership certificates existed, but were in the wrong hands, such as estranged husbands or other relatives, preventing those currently

living on the land from claiming the grant to rebuild (Chapter 2.6).

# There were some complaints about 'inflated beneficiary lists,' primarily because of multiple home ownership.

In all four districts, researchers heard claims of corruption and unfair distribution of grants to families who were not in need. Some complained about local representatives pushing for undeserving households to be added. A small number of NRA and GMALI officials alleged that local representatives were recommending false claims. "Ward offices have sent multiple false recommendations through the grievance process, and it makes the selection of genuine households difficult," said a GMALI official in Sindhupalchok. Others complained that individuals themselves were asking to be added to beneficiary lists despite not technically qualifying. In these instances, however, communities thought that the presence of locally elected representatives had also made locals more apprehensive about being caught and penalized for taking advantage of the reconstruction grants.

Complaints about wrongful inclusion were primarily centred on three issues: a) beneficiaries with a second house elsewhere; b) beneficiaries with sib-

lings who divided a parental estate to avail multiple grants; c) beneficiaries with siblings who availed multiple grants by showing the same damaged property, without dividing the parental estate. The latter two issues were particularly common in urban areas, especially Bhaktapur. For instance, although 24,551 individuals in Bhaktapur took the first tranche of NPR 50,000 (USD 415), only 9,218 took the second tranche. An HRRP representative in the district said, "There are people who have two houses and one was affected; one in the town area away from core area. Those people took the first tranche and did not rebuild; instead, they lived in the other house because they do not need to rebuild." DRCN also met with individuals who had two homes (both included in the beneficiary list), who said they had only taken one grant because they had heard beneficiaries would be arrested if they took both grants. Cases of 'inflation' of beneficiary lists seemed to result from a rush to include most beneficiaries in the completely damaged category.

There had been efforts of local political party representatives, observed in both IRM-2 (February-March 2016) and IRM-3 (September 2016), who were pushing to have as many households with damage as possible included under the completely damaged category, regardless of the extent of their housing damage. Later, local governments pushed for those with partial damage to be considered to have full damage, as described above. While the intention was mostly to ensure that all those suffering damages received compensation in the form of the housing reconstruction grant, it led to some people being included as beneficiaries for the grant despite having had minor housing damage which could be repaired, or having other, undamaged houses. In some places, like Chautara Sangachokgadhi of Sindhupalchok, GMALI had started sending letters to those beneficiaries who took the first tranche without an intention to rebuild their houses, encouraging them to either complete rebuilding, or return the first tranche money.

## 3.1.3 Satisfaction with the grants

Beneficiaries were satisfied with the housing grant scheme, but remained dissatisfied with the amounts provided. While people expressed general satisfaction with the overall reconstruction assistance process, dissatisfaction remained over the cash amount, arguing that the assistance was too small in relation to rising costs of reconstruction—a common finding in previous rounds of IRM<sup>63</sup>. In IRM-5 (November 2019), complaints about the grant amount being too small continued to be very common and many said they had hoped for larger grants, or that other forms of assistance would have been available, especially low-interest loans. Some said that they had gone into debt because rebuilding costs exceeded the grants (Chapter 4.1.3 and 4.1.4). Households and local stakeholders also raised other hindrances to rebuilding, including the timing of tranche distribution (such as the distribution of the first tranche before the Dashain festival, and long delays between the first and subsequent tranches) and the division of the grant into multiple tranches (providing too little money up front for initial expenses). Housing grant beneficiaries repeatedly complained that the first tranche had not even been enough to pay masons and laborers, and so many had to take out loans to cover these expenses (Chapter 4.1.1). The amount provided for retrofitting was also considered much too small (see below).

People complained about the fact that the grant amount only made it possible for them to build a small house, which was inadequate for their needs. However, as noted in Chapter 2.2.2, satisfaction differed between socio-economic groups, with the poor (who had little before and expect little from the government, which had long marginalized them) being more satisfied. For example, in Okhaldhunga, many respondents said the grant was much too small, but did not complain because they took the grant as a generosity, not as their right. Richer, more privileged and educated households, on the other hand, were more aware of their rights and dissatisfied with the government's earthquake response.

## People were dissatisfied with the retrofitting grant, especially the grant amount.

As described in Chapters 2.4.1 and 3.2, there was limited understanding of the retrofitting option among those declared eligible for retrofitting, and among engineers, local representatives, and other stakeholders. As such, respondents did not express nuanced opinions about the retrofitting grant. DRCN researchers met only one person, in Sindhupalchok, who had successfully retrofitted their house under the government retrofitting scheme, but had only

<sup>63</sup> The Asia Foundation and Democracy Resource Center Nepal (2017). Aid and Recovery in Post-Earthquake Nepal: Independent Impacts and Recovery Monitoring Phase 4 – Qualitative Field Monitoring (April 2017). Kathmandu and Bangkok: The Asia Foundation

received the first tranche to date, as well as another person who had received the retrofitting grant in Suryabinayak Municipality, Bhaktapur. Most of those doing retrofitting or repairs did so on their own, without support from a government grant, as the retrofitting scheme was considered 'not worth it' and too complicated to navigate (Case Study 3.3, and Chapter 2.4).

Yet, among those declared eligible for retrofitting (but who had not yet taken the grant) and from other stakeholders, such as local governments, researchers frequently heard complaints about the retrofitting amount being too small, especially in comparison to the reconstruction grant.. Since the distinction between retrofitting and reconstruction did not exist when the housing reconstruction program was rolled out, most households initially expected to receive the full grant of NRP 300,000 (USD 2,500). When those with partial damages were later told they would only receive NRP 100,000 (USD 830) for retrofitting, this was perceived as a downgrade from the 'full' grant to a 'partial' grant. This may be a key reason why dissatisfaction over the amount available for retrofitting was widespread. Some have since tried to upgrade to the housing reconstruction grant of NPR 300,000 by filing grievances – partly because they needed more money, but also because many had already demolished their old house and begun building a new one, had done costly repairs on their own, or simply did not know how to complete the retrofitting of their house according to guidelines. Those for whom retrofitting was a viable option - because their house was only partially damaged and still standing raised the issue that retrofitting was just as expensive as rebuilding and therefore, a smaller grant amount was both inadequate and unfair.

## Respondents expressed mixed opinions about equal grant amounts for everyone.

In earlier IRM reports, satisfaction with equal distribution of relief and housing grants to all affected households, irrespective of socio-economic status and degree of earthquake losses, was reported as high. Most thought it was fairer than targeted distribution.<sup>64</sup> By IRM-5 (November 2019), however, respondents were increasingly questioning the one-

size-fits-all grant policy. In Okhaldhunga, people often pointed out that it was unfair to give the same amount to all households, but also thought that different amounts for different people would have been difficult to implement in practice and that the government's decision to provide the same amount to all was reasonable. In Gorkha, people were concerned that the blanket approach of distributing an equal amount to all beneficiaries, regardless of their economic status and distance of settlement from markets and roads, had resulted in inequality and added financial burden to some households.

NRA officials and local representatives often expressed that the grant was not equitable. A GMALI representative in Bhaktapur said the housing grant should have been categorized based on the beneficiary's financial situation. He said, "Giving the same amount to the rich and the poor was not a great idea." He said that the assessment of beneficiaries was inadequate because there was no categorization of beneficiaries based on socio-economic status and needs. A deputy mayor in Bhaktapur pointed out that urban and rural requirements for reconstruction support are different. He said, "Because the issue of urban reconstruction is complicated, the NRA should have differentiated in terms of grants." Similarly, a teacher at Shree Rama Secondary School in Attarpur, Lisankhu Pakhar, Sindhupalchok, said, "The government did not prioritize vulnerable groups. Special assistance to vulnerable groups should have been offered, like loans at the lowest interest rates." Many local representatives said that equal distribution had led to inequalities and that zero- or low-interest loans would have been highly helpful to vulnerable and poor groups.

#### 3.1.4 Access to information

## Radio, engineers, and local government officials emerge as key information sources.

Both previous IRM reports as well as the IRM-5 survey, conducted in parallel to this research, found that family, friends, and neighbors were main sources of information on reconstruction and housing grants. <sup>65</sup> This shows that the trickle-down effect of having certain households spread awareness in their area

<sup>64</sup> The Asia Foundation and Democracy Resource Center Nepal (2015). Aid and Recovery in Post-Earthquake Nepal: Independent Impacts and Recovery Monitoring Phase 1 – Qualitative Field Monitoring (June 2015). Kathmandu and Bangkok: The Asia Foundation. See also, Phase 2 and 3 report.

<sup>65</sup> The Asia Foundation and Interdisciplinary Analysts (2020). Aid and Recovery in Post-Earthquake Nepal: Independent Impacts and Recovery Monitoring Phase 5 – Quantitative Survey (September-October 2019). Kathmandu: The Asia Foundation

#### Case study 3.3: The choice to retrofit independently

Devi's home was in the middle of Chautara bazaar, Sindhupalchok. It was a five-storey house with 9-by-9 inch RCC pillars. The earthquake did not fully destroy the house, but damaged it. Her family lived in a temporary shelter for a year. Engineers asked her to demolish the house and build a new one. Her family agreed, but the house was connected to neighboring houses on both sides, and these homes were safe to live in and did not require any repair or retrofitting. If Devi were to demolish her house, both the neighboring structures could have been damaged.

She therefore chose to retrofit her house instead.

The engineers suggested she construct 20-by-20 inch pillars for retrofitting. The family retrofitted their home, as per the engineer's suggestions, and have been using as their residence and for business activities.

Devi never took the retrofitting grant of NPR 100,000 (USD 830). The grant was too little, especially as the family had spent almost NPR 2,000,000 (USD 16,600) to retrofit the house. Devi's husband did not want to go through the complicated government process for the cash grant, but decided to still follow the retrofitting guidelines.

should not be underestimated. However, by IRM-5 (November 2019), people increasingly came to rely on other sources of information too. Firstly, other sources of information had become available, and secondly, people had come to understand the process better and were more likely to need specific technical or procedural guidance, rather than general information about amounts of the grant, timing, access, or requirements to receive subsequent tranches. To receive such expert technical or procedural advice, they were more likely to seek out government and non-government engineers, social mobilizers, or elected representatives. Respondents widely agreed across all districts that better access to engineers and the presence of local government officials had hugely improved access to information.

Local FM stations and TV stations, unlike in IRM-4, were found to be important sources of information on the grievance process and tranche-related deadlines. NRA officials used local radio stations as a tool to disseminate information. Social media was also used occasionally by NRA officials and government technical staff to share information between themselves and with housing grant beneficiaries.

## Information gaps remained, despite better awareness among grant beneficiaries.

Generally, information about the housing grants had improved and people were much less confused about the process and requirements than in IRM-4 (April 2017). In particular, information on access, eligibili-

ty, technical requirements, and grievance procedures had improved. However, some information gaps and misconceptions remained.

DRCN observed that the biggest communication gap in the NRA's work to date had been its inability to disseminate information on the variety of models available for beneficiaries to build houses to suit their lifestyle needs. Messaging on approved house models remained confusing to many, and earlier misconceptions had not yet fully disappeared. As found in earlier IRM rounds, the general impression on the ground remained that the NRA grant was to be used only to construct structures according to NRA models of one- or two-room houses. Many were still not aware that the NRA financial and technical assistance was meant to ensure earthquake resilience and not to confine their options to replicating NRA models. In IRM-4 (April 2017), beneficiaries had hoped for more flexible building codes, as the NRA-approved models were culturally insensitive or too expensive. While the NRA has since expanded models and approved any type of house that fulfils criteria for earthquake-resilience, very few people seemed to know this, even in IRM-5 (November 2019). Engineers generally gave the impression that beneficiaries had to follow the most commonly advertised NRA models for two-room houses (see Chapter 3.2). This meant that most recipients built small houses quickly, to ensure they received the grants, but did not necessarily build according to their needs (Chapter 2.2).

Information on retrofitting and government soft loans was also limited and inconsistent. Many people had heard about government soft loans, but few knew how to access these loans, and many did not even try because of the perception that banks only provided loans to wealthier people with collateral and connections (Chapter 4.1.3). Awareness of retrofitting had improved, but few understood what

it entailed or why it might be suited for their partially damaged house (Chapter 2.4). People were also uncertain on whether they had the right to sell their houses after they were built, and whether they needed to demolish their old houses to receive the full reconstruction grant and a house completion certificate.

#### 3.2 Technical assistance

#### **Key findings: Technical assistance**

Access to technical assistance has improved. The increased presence of engineers in municipality and ward offices following the 2017 local elections was seen to have improved access to technical information and supervision. Yet, non-government engineers were often perceived to be more helpful than government-deployed engineers, except in Bhaktapur.

Some earlier challenges persisted, and the technical assistance received was often considered inadequate. Appointed engineers still changed frequently, access remained more difficult in very remote areas, coordination between government and non-government engineers remained a challenge, and the quality of assistance provided was questioned by those who needed tailored guidance, especially on retrofitting. Technical assistance remained focused on assessing compliance and processing housing grants, but people lacked information about what kind of houses they could build or retrofit.

#### 3.2.1 Access to engineers

Access to technical assistance has improved after local elections, but gaps remained.

Since beneficiaries had to rebuild/retrofit according to approved building guidelines to receive the full amounts of their housing grants, technical assistance was crucial to the success of Nepal's housing reconstruction program. Initially unavailable in many areas, access to technical assistance has improved over time as the government and INGO/NGO have trained and deployed more engineers, social mobilizers, and masons to earthquake-affected areas to provide technical guidance.

When the housing reconstruction program was initially rolled out in 2016, technical assistance was not widely available, not enough engineers were deployed, and those deployed were inexperienced and remained unsure of their roles and working conditions. By IRM-4 (April 2017), engineers were more

active in districts where cash grants had been distributed, although several government engineer positions still remained vacant. Engineers were observed to be informing citizens about the housing grant process and building requirements, and helped process application forms for the second grant tranche. More masons and social mobilizers had also been trained and provided information by that time.

In IRM-5 (November 2019), respondents widely agreed that it had become easier to access technical assistance, especially after the election of local representatives in 2017, and the increased presence of engineers in municipality and ward offices. People now knew where to find engineers if they needed them, and local government representatives had also become involved in coordinating between government-deployed engineers, masons, and earthquake victims in the process of rebuilding. "We urge the engineer and beneficiaries of the ward to work efficiently and promptly, and we also request local beneficiaries of the ward to proceed with house building



A man above his settlement in Suryabinayak, Bhaktapur, 2019. Photo by Prabhat R Jha

work quickly and efficiently," explained a ward chair in Sindhupalchok. Improved access to engineers was perceived as a huge improvement by communities who now found it easier to access information and guidance on technical requirements of rebuilding. The engineers also thought their work had become easier since the arrival of local governments, as expressed by an NRA engineer in Sindhupalchok. "After the arrival of local governments, the work progress has been smooth and swift. Palika [municipality] officials do supervision, monitoring, and evaluation, which has eased the reconstruction process."

Nevertheless, some of the gaps already observed in IRM-4 remained. Appointed engineers still changed frequently, access remained more difficult in very remote areas, coordination between government and non-government engineers remained a challenge, and the quality of assistance provided was still questioned by many who needed better guidance, especially on retrofitting (see below). Yet, as a resident in Lisankhu Pakhar Rural Municipality, Sindhupalchok, said, where engineers were present, "their involvement made reconstruction faster and more effective."

Non-government engineers were perceived to be more accessible than government-deployed engineers, except in Bhaktapur. In IRM-5 (November 2019), technical assistance was available either from government engineers deployed to municipalities, or from engineers, masons, and social mobilizers deployed by non-governmental organizations. In the districts visited, researchers found that GOI-UNDP, JICA, Save the Children, CRS, Helvetas, Swara Saghan, and others had trained engineers, masons, and/or social mobilizers to provide technical assistance to those rebuilding.

In rural areas, access to, and efficiency of, non-governmental resource-persons was perceived as greater than those of government employees. In Bhaktapur, however, respondents said they were fully satisfied with government engineers. In this district, engineers had visited beneficiaries at least twice during reconstruction. They also went out into the field every day after noon. A possible explanation for the positive perception was provided by a GMALI representative, who pointed out that almost all of the government engineers in Bhaktapur were local residents who could understand the language and the local situation. "The engineers are young and hardworking; many of them are women," she added.

Yet, government engineers appeared to be not only more accessible than in 2016-2017, but also took more initiative. For example, in Okhaldhunga, social media was used by NRA officials and government technical staff to share information. Technical staff of Molung

Rural Municipality, Okhaldhunga, said they had created a Facebook group chat to connect with all technical staff working in other municipalities to share information. The NRA district office in Okhaldhunga had also created a Facebook page to share information

# Frequent changes of technical staff, and relations with elected representatives, posed challenges.

Turnover of government-deployed technical staff and engineers was observed to be high in previous IRM reports. This still remained an issue in several places in IRM-5 (November 2019). The engineers had often been deployed late and were then transferred quickly, leading to information gaps at the local level. This was perceived as a challenge by communities, local governments, and the engineers themselves.

NRA engineers in Okhaldhunga told DRCN they had been deployed late, and that the frequent change of engineers in the district and in local units had hampered reconstruction. One of them thought the government policy for housing grants and technical assistance had come late, and frequent changes in the policy and rules had made their work difficult. In Lisankhu Pakhar, Sindhupakchok, engineers had also changed frequently, making it harder for people to access technical assistance. A school teacher in Lisankhu Pakhar thought that late and inconsistent technical assistance delayed reconstruction there. He said, "If the government had deployed technicians and masons from the beginning, like JICA, reconstruction would have been completed now."

Handover between engineers was found to be lacking in some places where they had changed quickly, making it harder for newly appointed engineers to do their work. In Lisankhu Pakhar, Sindhupalchok, the previous engineer had not handed over data to the newly appointed engineer. As a result, DRCN was unable to collect reconstruction data from the engineer in this rural municipality. In a ward of Chautara Sangachokgadhi Municipality in Sindhupakchok, the previous NRA engineer also failed to hand over data to the new appointee.

Although there were no widespread allegations of favoritism and corruption against government engineers, DRCN researchers heard of sporadic instances of conflict between technical staff and local elected representatives, with the latter levying charges of corruption against the former. For example, two ward chairs in Gorkha complained to have 'corrupt' NRA engineers transferred after elected representatives were given the authority to do so. In Lisankhu Pakhar, Sindhupalchok, the administrative officer reportedly did not support NRA engineers and had the previous one transferred. IRM-4 (April 2017) found that engineers were being provided food and accommodation, which could affect their objectivity, but this was not a common concern in IRM-5 (November 2019).

## **3.2.2** Quality of technical assistance

Technical assistance remained focused on assessing compliance and processing housing grants, but people still lacked information about what kind of houses they could build or retrofit.

There were gaps, not only in the coverage of technical assistance, but also the depth and quality of technical information and assistance provided to housing grant beneficiaries. While this research cannot assess the technical quality of assistance provided, it highlights how local stakeholders perceived the quality of assistance available to them, and whether it met their needs.

The research found that reconstruction goals of technical staff and earthquake-affected households did not necessarily match. As mentioned in Chapter 3.1.5, information and communication gaps have caused confusion among beneficiaries about what type of house they could build. This led to the misconception that people had to build according to the a small number of NRA-approved housing models shared earlier in the reconstruction process. While the variety of models and types of houses that could be built has since been expanded, the misconception that people had to build two-room 'earthquake houses,' as per the earlier standard models, persisted. As a result, many built smaller houses than they needed and complained that the new houses were unsuited to their livelihoods and socio-cultural needs (Chapter 2.2) - although limited access to finance also played a major role in why people built smaller (Chapter 4). Many others, who may have wanted to repair or retrofit their house, also rebuilt two-room houses due to lack of information on retrofitting options (see below).

There are various reasons why government engineers rarely provided nuanced and individually-tailored information to those rebuilding on the variety



A man being interviewed between his new house and earthquake shelter, Suryabinayak, 2019. Photo by Lena Michaels

of building options available, nor guidance on how to build according to needs. First, as mentioned in previous reports, there were gaps in the coverage of technical assistance, with many areas having no access to it, when rebuilding began. Second, information on approved building types and model houses changed over time, but initially focused on RCC and BCM houses, which quickly became the standard for 'earthquake houses.' Third, engineers were generally young and may have not have had sufficient experience or training to provide information on other, perhaps more complex, building models and methods. Fourth, government technical assistance has remained focused on processing, assessing, and approving houses for the grant system.

NRA employees were pre-occupied with ensuring compliance to building codes, and collecting and maintaining housing grant data, with the aim of reaching high reconstruction success rates – as per instructions they received. While they largely did their work diligently, they were rarely responsive to beneficiaries' differing needs, budgets, and preferences, and rarely considered traditional, local building practices or locally available materials. Even in late 2019, many engineers were still giving the impression that early housing models had to be followed in order to receive the housing grants. For example, in Gorkha, NRA engineers gave the impression to beneficiaries that the NPR 300,000 (USD 2,500) reconstructing grant could only be used to construct

homes from the NRA-approved house models. Beneficiaries were still unaware that the NRA's financial and technical assistance was intended towards making their homes earthquake-resilient, and that they did not need to confine themselves to building according to the model houses and could, in fact, build bigger than one- or two room-houses. The same was true for most masons who were equally focused on ensuring compliance and access to the housing grant. "We are only concerned about the standards of the new house and we help people in the process to receive the tranches [of housing reconstruction grant]," a mason working in Sindhupalchok said.

#### Information on retrofitting was weak and still confused beneficiaries, engineers, and other stakeholders.

The option of retrofitting was not communicated timely and adequately to actors at all levels, including beneficiaries. In addition, technical assistance for retrofitting was extremely limited. As mentioned in Chapter 2.4, the distinction between retrofitting and repairs was not well understood by affected households, but even engineers and masons said they did not know enough about retrofitting and had not received sufficient training on it.

IRM-5 (November 2019) found that many engineers and social mobilizers used 'repair' and 'retrofitting' synonymously. Engineers from GMALI and DLPIU





- 1. Damaged house in Chhetrapati, 2015. Photo by Prabhat R Jha
- 2. Damaged houses in Kathmandu, 2015. Photo by Prabhat R Jha

(building and education) based at district headquarters seemed to know about retrofitting, but there was little technical clarity among the engineers appointed at the ward and municipal level. There is no course on retrofitting in Nepal's engineering curriculum, and most NRA engineers received training through the use of slides, rather than hands-on experience in retrofitting. In Okhaldhunga, a week-long training on retrofitting was provided to engineers in Molung Rural Municipality, but the engineers said they were not confident about retrofitting a house. In Suryabinayak Municipality, Bhaktapur, NRA engineers expressed that they needed field-based training, rather than training through PowerPoint slides. Similarly, GOI-UNDP engineers in Gandaki Rural Municipality, Gorkha, said they were trained in retrofitting through flex-prints that showed the process, which was insufficient to instil confidence in the process to beneficiaries and masons.

In Gorkha, respondents, including social mobilizers, admitted to being unsure of the difference between the need for retrofitting, and partial and fully damaged houses. There was particular ignorance about the possibilities concerning the retrofitting of SMM houses, which were the most frequently damaged house type in Gorkha bazaar. A social mobilizer with GMALI in Gorkha responsible for communicating to beneficiaries their rights and privileges, asked, "Isn't retrofitting the same as repair (marmat)?" Local masons were also confused about retrofitting. "How could poking more holes into an SMM house make it stronger, even if it is tied together with galvanized iron wire?," said one in Gorkha. In Bhaktapur, local representatives and earthquake victims were also un-

sure about the difference between retrofitting and repair. Those who told DRCN researchers that they did 'retrofitting' were instead found to have done repairs on their own. A resident in Bhaktapur district who received the first tranche of the retrofitting grant, which he used for repairs, complained, "We didn't receive any training about retrofitting, so we did it in our own style – we glued the wall back together with cement plaster... They should have trained us about retrofitting standards just after providing the first tranche."

It is not surprising then, that very few households have taken up retrofitting, even among those eligible for the retrofitting grant, and that hardly anyone considered it a better option than rebuilding. Even in Bhaktapur, where many had not yet rebuilt and lived in partially damaged houses, a representative from the Municipality Heritage Department said, "Retrofitting is not acceptable in society, so even if it was more expensive to build a new house, people preferred doing that." Since many engineers and other technical staff themselves were not at ease with retrofitting, it seems unsurprising that earthquake-affected households were skeptical and had concerns about costs, practicality, the difference to repairs, safety, and how to actually do retrofitting.

Several journalists, technical staff, and local representatives thought that if adequate information about retrofitting had been made available to beneficiaries earlier on, the demolishing and rebuilding of many partially damaged houses could have been avoided. Some engineers said beneficiaries would not have taken on expensive loans to build a new structure if they had known about retrofitting earlier.

## 3.3 Grants for vulnerable households

#### **Key findings: Grants for the vulnerable**

Starting in 2016, the NRA established policies to address the special needs of vulnerable earthquake victims, but knowledge of these was limited in areas visited. DRCN found that hardly any vulnerable households had received additional top-up grants made available for vulnerable households at the time of research – neither from the NRA nor from non-governmental aid providers.

The NRA identified four categories of vulnerable groups, but local level stakeholders rarely knew about this and if they did, thought the categories excluded many others who might be even more vulnerable, especially very poor households who did not fit the NRA's four criteria. Local governments were aware of who was struggling to recover after the earthquake in their area, but most did not provide special support to vulnerable households.

Starting in 2016, the NRA established policies to address the special needs of vulnerable earthquake victims, as many were found to have fallen behind in rebuilding their houses. The NRA has defined four categories of vulnerable households, including single women over 65 years, senior citizens over 70 years, minor-headed households (under 16 years), and those with government-issued disability identity cards<sup>66</sup>. This vulnerability criteria explicitly excludes any other 'disadvantaged and marginalized groups,' while recognising that these types of households might also require additional and targeted social and technical support.<sup>67</sup>

New *Procedures*<sup>68</sup> issued by the NRA allow vulnerable households from these four categories, "who are not a position to reconstruct their houses, even with the grant<sup>69</sup>," to access an additional grant of NPR 50,000 (USD 415) on top of the NRA housing

grants. These 'top-up' grants were to be provided by non-governmental donors and partner organizations, as well as the NRA. The top-up grants for vulnerable families were to be provided to all those enlisted in the NRA list of vulnerable groups who had not yet taken additional support from non-governmental organizations as of May 2020.<sup>70</sup>

The NRA's subsidized loans of up to NPR 300,000 (USD 2,500), at the low interest rate of two percent, were also made available to households recognized as vulnerable, upon the recommendation of the District Disaster Relief Committee, with the wider community acting as a guarantor for the loan. In practice, however, hardly any vulnerable households had accessed these loans.<sup>71</sup> Despite changes to subsidized loans schemes for earthquake-affected households to make low-interest loans more accessible, they remained generally

<sup>66</sup> The NRA ... has defined four vulnerability criteria to identify the most vulnerable households being: senior citizens above 70 years, single women above 65 years, people living with disabilities (red or blue card holders), and minor-head households (under 16 years). http://www.nra.gov.np/uploads/docs/gEDcfl2NJr191209055531.pdf pp 20, Accessed on 5 July, 2020.

<sup>67</sup> ibid, p20

<sup>68</sup> Procedures related to the mobilization of non-governmental organizations for reconstruction and rehabilitation, 2016 (revised January and April 2017) and Procedure Relating to the Identification of Earthquake-affected Beneficiaries from Vulnerable Groups. See also: 'Environmental and Social Management Framework'. GoN/NRA. 2019.

<sup>69</sup> http://nra.gov.np/en/news/details/vvIBeet91TypYfswcItzVJyubwo-P7lHW1H8wq7qS72I

<sup>70</sup> The NRA Executive Committee Meeting held on 8 May 2020, decided to provide top-up support of NPR 50,000 to vulnerable households who have not been able to reconstruct their houses. The beneficiaries should be enlisted in the DLPIU-GMaLI vulnerable list and must not have taken support from partner organizations. They should be endorsed by the Ward Chairpersons followed by Rural Municipality Chairperson or Municipality Mayor with the final approval from the District Reconstruction Facilitation Committee to be eligible for the top-up support. https://drive.google.com/file/d/iiE\_TZJoZ20zFNc01c5ZVUcZLoNX-qcJc-/view

<sup>71 &</sup>quot;Earthquake-affected to have easier access to subsidized loan". 2019. NRA. Available at: http://nra.gov.np/en/news/details/cJjqjJn-RM-oaIgxnJyI9SewgTvKHwAGvolrZ5Lg62fA



A woman in front of her temporary shelter with her newborn. Suryabinayak, Bhaktapur, 2019. Photo by Prabhat R Jha

inaccessible<sup>72</sup>, especially for vulnerable households who may have needed them most (Chapter 4.1.3).

Additional grants for vulnerable groups were not widely available in November 2019, but non-governmental actors were providing aid to vulnerable households in some areas.

Despite meeting many vulnerable households falling under the four categories identified by the NRA (Chapter 2.6), DRCN did not find evidence of vulnerability top-up grants being provided to those in need in November 2019, by either non-governmental or government assistance providers. DRCN met only one case of an elderly single woman in Chautara Sangachokgadhi of Sindupalchok who had received additional cash support.<sup>73</sup>

Some vulnerable households, however, had received INGO/NGO assistance in the form of material or livelihoods support, under programs that were specifically targeted towards the most vulnerable. For instance, in areas where it was active, JICA deployed mobile mason units that would help build the houses of the most vulnerable, allowing them to save money on labor costs. JICA also supported vulnerable groups by

buying building materials on credit, which they could pay back after receiving the NRA grant. Non-governmental actors also supported vulnerable groups through various livelihood programs, like agricultural training, distributing seeds, mobile mason training, and providing livestock to increase their income.

Knowledge of additional grants for vulnerable households, and understanding of the NRA's categories of vulnerable groups, was limited at the local level.

In IRM-5 (November 2019), most government officials and other key informants at the local level were not aware of the additional NPR 50,000 (USD 415) grant for vulnerable households. Elected representatives and local government officials also showed limited awareness of the NRA's categorization of vulnerable groups. In Sindhupalchok, a municipality vice-chairperson said they had identified vulnerable households as per the NRA's request. "The NRA asked us to prepare and send the list of vulnerable groups who need special assistance. We did send it, but there has been no response from the NRA. We repeatedly followed up, but there is no clear position of the NRA on this matter." This vice-chairperson was unable

<sup>73</sup> She received an additional grant of NPR 50,000 but researchers could not verify who had provided this grant.

to say what the NRA's criteria for vulnerable groups were and which ones they had identified. In Gorkha, vulnerable groups were identified according to the NRA's instructions, but here too, no further actions had been taken, according to local government representatives. In Okhaldhunga, local governments did not seem to know about the NRA's lists of vulnerable groups. In Bhaktapur, respondents said they did not know of special schemes for vulnerable households.

The few local government respondents who knew about NPR 50,000 (USD 415) additional grants for vulnerable households thought that it would not be enough to help them rebuild, as they tended to need much more than an additional NPR 50,000 – in addition to the housing grant – to be able to rebuild. Local representatives and leaders also raised the question of whether those who did not even receive the housing grant, often due to lack of land or citizenship documentation, would be able to receive the top-up grant for vulnerable households – and even if they did, how they would rebuild with only NRP 50,000 of support.

#### Local governments did not initiate action to support vulnerable groups, but were able to point to those struggling to recover.

Local level respondents largely considered the government response to post-earthquake vulnerabilities inadequate, but did not take the initiative themselves to support vulnerable groups for reconstruction. In their annual planning, local governments are required to ensure allocation of budget and resources in various social sectors, so there are policies targeting the economic and social welfare of marginalized communities. However, these policies do not specifically address the particular needs and vulnerabilities linked to the earthquake. Some municipalities had prepared lists of vulnerable households, as per the NRA's instructions (see above). Gandaki Rural Municipality, in Gorkha, had made their own categories to officially identify the most vulnerable, based on economic need.

Even in the case of disabled households, limited attention was given by local officials to their specific needs, while there was also weak consultation between engineers and disabled beneficiaries to support them in reconstructing disability-friendly houses (Chapter 2.2.1). While some local leaders got



Earthquake-affected senior citizen unable to rebuild due to family dispute, Bhaktapur, 2019. Photo by Pallavi Payal

involved in resettlement debates (Case Study 3.4), local government support for resettled households was generally limited (Chapter 2.1.2). As reconstruction was centrally led, with limited involvement of local actors, it may not be surprising that local governments did not make efforts to address specific needs and vulnerabilities of earthquake survivors.

The definition of vulnerability, proposed by the NRA, does not seem to have translated well into the local level, where people often had a different understanding of vulnerability. Generally, local governments could identify who had fallen behind in reconstruction in their area and needed additional support, but most local officials and leaders referred to poverty as an indicator of vulnerability, pointing out that the poorest and Dalits were struggling due to the lack of economic resources. "There is no government priority concerning particularly vulnerable groups. Special assistance to vulnerable groups should have been offered – this assistance should be a soft loan," suggested a ward member of Linsankhu Pakhar, Sindhupalchok.



Government-owned land provided to a displaced Dalit community in Barpak, Gorkha, 2019. Photo by Manasi Prasai

#### 3.4 Resettlement grants

#### Key findings: Grants for the displaced and landless

The NRA made special support and grants available for displaced and landless households. These were being implemented and local stakeholders were aware of these in areas visited, in contrast to

the vulnerable top-up grants. Several households included in this study had received special support under these schemes.

The NRA made special support and grants available for landless households and those having to resettle due to earthquake impacts. On February 25, 2019, the NRA announced that, in addition to the NRA housing grant, any landless household whose house was damaged in the earthquake, or one displaced because of geological earthquake damage to their land, would be given a resettlement grant of NPR 200,000 (USD 1,660) to buy land in another area within the home district, or in an adjacent ward to rebuild.74 Landless households previously squatting on public or government land could rebuild their homes on the plot of land they had been occupying, provided they could furnish proof of occupation in the form of electricity, water, or telephone bills at their address, and with a recommendation from the local government.75 The NRA was also authorised to provide government land to landless earthquake survivors who were unable to attain new land with the NPR 200,000 (USD 1,660) grant. According to an NRA publication, "The NRA has been given authority to provide the government or degraded forest land to beneficiaries who could not arrange land on their own with the NPR 200,000 provided to them by the NRA; or the government should acquire land on their behalf and distribute it to them... [B]eneficiaries in mountainous regions will get plots of 10 aanas [approximately 318 square meters] each, those in hilly regions will get plots of 6 aanas [approximately 190 square meters] and those in the Kathmandu Valley will get plots of 4 aanas [approximately 127 square meters] each."76 This provision is for beneficiaries who have not suc-

<sup>74</sup> http://nra.gov.np/en/news/details/vvIBeet91TypYfswcItzVJyubwo-P7lHW1H8wq7qS72I [Accessed on 10 June, 2020]

<sup>75</sup> http://nra.gov.np/en/news/details/vvIBeet91TypYfswcItzVJyubwo-P7lHW1H8wq7qS72I [Accessed on 10 June, 2020]

<sup>76</sup> Vulnerable and integrated settlement development program http://www.nra.gov.np/np/resources/details/9VrTBZPwJV1C5ZyicyoXpE-H5uGh6xewL5vhOHLj3YqI [Accessed on 10 June, 2020]



Remnants of a landslide that occurred in the monsoon of 2018 in Barpak, Gorkha, 2019. Photo by Manasi Prasai

ceeded in purchasing land on which to build homes with the NPR 200,000 provided by the NRA, due to unavailability of suitable land where their settlement

had been, or because the grant amount was not sufficient to purchase as much land as their old homes had occupied.<sup>77</sup>

#### Case study 3.4: Dalit leaders actively involved in community resettlement

Dalit households from the village of Gaihrigaun in Barpak, Gorkha, had to move after the earthquake when their land was declared unsafe for living. They built temporary shelters on government land near a highway close to the Gorkha bazaar town. Some had since returned to their original village, while others continue to live in shelters on the government land. This split in the community was due to differences and competition between two local political leaders from the community. The older one, active since the Panchayat era, supported those remaining on government land. His younger relative, who is the ward chair, was linked to those who had moved back to their lands in Gaihrigaun to rebuild their homes.

The Gaihrigaun Dalits occupying government land in Barpak bazaar want to be given the land they occupy. Supported by their leader, they demanded to be compensated with an equal area of land, as they had vacated their houses in Gaihrigaun, as per NRA provisions for the displaced. Costs for land in the bazaar, however, are much higher than in Gaihrigaun with a small storefront, just under three metres in length, costing around NRP 1,200,000 (USD 10,000). The NRA grant for purchasing land to resettle is NPR 200,000 (USD 1,660). For this reason, their resettlement remains controversial and has yet to be resolved. With half of the community having already returned to their original land, the demands for resettlement may not be met.

<sup>77</sup> By December of 2019, the NRA had 'procured and managed' land for 8,744 landless people. http://www.nra.gov.np/uploads/docs/gEDcfl-2NJr191209055531.pdf [Accessed on 9 June, 2020]

Another NPR 50,000 (USD 415) can, in theory, be accessed by the displaced or landless if they meet the NRA's definition of the four categories of vulnerable households which allows them to receive the vulnerability top-up grant (Chapter 3.3). A further NPR 300,000 (USD 2,500) in soft loans – at an interest rate of two percent per annum, with the GoN underwriting up to an additional five percent in interest – was available if the District Disaster Relief Committee provided a recommendation.

#### Special grants and policies for displaced and landless households were being implemented and local stakeholders were aware of these.

As mentioned in Chapter 2.1.2, there was progress in resettling households displaced by landslides or other damages to their land. DRCN researchers met several households in each district who had received government grants for resettlement of NPR 200,000 (USD 1,660) – although they also met an equal number of households who had not yet been able to resettle or rebuild, even though their land was declared unsafe. Researchers also met house-

holds who were given the land they had long occupied. Setimaya in Sindhupalchok had been living by a public forest for over 30 years before the earthquake. Being able to build on land, with a title of ownership, has strengthened her sense of dignity. She saved some money from the NPR 200,000 (USD 1,660) she received towards purchasing the plot of land and spent it on buying sand and gravel for the new house.<sup>78</sup> "No matter how small," she said, "I own land now. No one has the right to tell me to leave now."

In contrast to the top-up grants for vulnerable groups, local awareness of provisions for landless and displaced households was high. Local government officials knew of the various provisions and some local leaders even got involved in resettlement cases (Case Study 3.4). Yet, as with vulnerability, local governments were not found to devise their own strategies for displaced communities, nor to push their agendas, largely due to the definition of their roles with decision-making authority remaining with the NRA.



Shelters on government-owned land for a displaced Dalit community in Barpak, Gorkha, 2019. Photo by Manasi Prasai

<sup>78</sup> https://asiafoundation.org/video/irm-project-interview-setimaya-damai-syaule-sindhupalchok/ [Accessed on 10 June, 2020]

# 3.5 Coordination and the roles of local governments

#### **Key findings: Governance and coordination**

The governance of the reconstruction process has remained centralized even after the devolution of certain responsibilities to local governments. Local governments contributed to the reconstruction process by facilitating the implementation of government schemes. They have supported the reconstruction process, aided the grievance process, and facilitated information-exchange and access to engineers. However, they commonly complained that all important decision-making and implementing powers remained with the NRA and that the roles given to local governments were limited and subordinate. District-level stakeholders similarly complained about their roles being reduced to forwarding policy decisions. The involvement of local political leaders and civil society actors remained limited.

Coordination has improved, but communication gaps persisted. Communities thought that the presence of elected representatives had improved coordination and information dissemination at the municipality and ward levels. Local governments, however, thought that coordination between local and central levels remained one-sided and slow, making it difficult for them to do their work effectively. They expressed that changes to NRA policies were not communicated to them in a timely and clear matter, and that they were not adequately consulted in the process. It seemed that the involvement of local governments as key actors, with strong two-way communication channels between central and local levels, could have strengthened the reconstruction process and paved the ground for future disaster response mechanisms in a decentralized governance system.

This section looks at the roles of local governments and coordination between different levels of government (not between INGOs, donors, and government) around implementing government policies and distributing grants. The latter is harder to observe at the municipality level. IRM research has observed coordination since 2015 and found that major challenges were encountered especially in the early phase of the earthquake response.<sup>79</sup> Some of these were overcome after improvements in the housing grant process and the involvement of local governments. However, key issues remained, even five years after the earthquakes, despite the election of local governments in 2017 and their subsequent involvement in reconstruction. The remaining issues include: 1) Atopdown approach with tight central-level controls and limited local level responsibilities, and 2) Coordination and communication challenges between various levels of government.

# Local governments contributed to the reconstruction process by facilitating the implementation of government schemes.

The first two years of earthquake relief and recovery were defined by a centralized response in the absence of functional elected local bodies. Nepal drafted a new federal constitution after the 2015 earthquakes, restructuring the country into provinces and local units with wide-ranging authorities. Local elections were held in late 2017, but with the centralized approach of NRA-led reconstruction already in place, and the new local governments largely focused in drafting other laws and setting up institutions to transition into a new federal system, local government only became involved in reconstruction from late-2018 onward.

<sup>79</sup> See IRM 1-3 qualitative reports, accessible here: https://asiafoundation.org/where-we-work/nepal/irm-project/

<sup>80</sup> The Asia Foundation and Democracy Resource Center Nepal (2016). Aid and Recovery in Post-Earthquake Nepal: Independent Impacts and Recovery Monitoring Phase 2 – Qualitative Field Monitoring (Febru-

ary and March 2016). Kathmandu and Bangkok: The Asia Foundation. And: The Asia Foundation and Democracy Resource Center Nepal (2017). Aid and Recovery in Post-Earthquake Nepal: Independent Impacts and Recovery Monitoring Phase 3 – Qualitative Field Monitoring (September 2016). Kathmandu and Bangkok: The Asia Foundation



A new school rebuilt with JICA support in Gorkha, 2019. Photo by Manasi Prasai

Between November 2018 and February 2019, local governments were given selected earthquake reconstruction-related responsibilities by the NRA through the signing of MoUs. Under these MoUs, the primary roles of local governments were around registering grievances around housing reconstruction grants, and managing and coordinating with NRA-deployed engineers and other technical employees. They could also help beneficiaries deal with impediments in the reconstruction process and coordinate with relevant authorities to resolve them. Finally, they could help ensure that houses being rebuilt are compliant with the building code and identify livelihood recovery needs.

In IRM-5 (November 2019), local governments were found to be involved in the reconstruction process, and local representatives seemed genuinely concerned about ensuring that all households would be able to rebuild earthquake-safe houses. Some spoke of a 'moral responsibility' to support earthquake survivors. A municipality chairperson in Sindhupalchok explained, "Our roles in the reconstruction process

are to correct names on beneficiary lists; carry out follow-up with GMALI; receive cash grant updates and notify beneficiaries [to pick up their grant amounts]; and to identify, verify, and forward names of genuine survivors [who were left out of beneficiary lists] to the NRA." Indeed, local governments across areas visited assisted with the filing of grievances, supported verification of complaints, facilitated access to engineers, managed and forwarded data, and shared information on central-level decisions, new policies, and changes to procedures. In one ward of Suryabinyak, the local government was able to facilitate the late inclusion of 92 households in the housing grant scheme. The facilitating and coordinating roles of local governments were seen positively by communities who thought it had significantly improved the reconstruction process (Chapters 3.1.1 and 3.1.2). Across municipalities visited, the roles of local representatives were found to be the same -facilitating roles, rather than implementing and decision-making ones - and all representatives interviewed agreed that their involvement had not changed since the signing of MoUs in late 2018 and early 2019.

## The involvement of local political leaders and civil society actors remained limited.

Local political leaders were often closely involved in the earthquake response right after the earthquakes.81 They helped distribute aid, lobbied on behalf of their communities, and were involved in early damage assessments, which were perceived more positively and accurately by affected households than later assessments, due to the involvement of local stakeholders.82 Over time, leaders were increasingly excluded from the earthquake response<sup>83</sup> and by 2019, most of them had turned their attention to other matters. Respondents generally agreed that local political leaders were rarely involved in the reconstruction process. However, political parties were found to be involved in lobbying for the resettlement of a community in Barpak, Gorkha (Case Study 3.4) and in the reconstruction of heritage sites in Bhaktapur. Researchers also heard isolated allegations of political pressures on engineers or social mobilizers to approve houses built for further tranches of the grant. Some leaders were found to help people file grievances or access information, but they did so in an individual capacity, rather than a party or official role. The majority of respondents, however, thought that the housing grant process was free of political interference.

Some local political leaders complained that they were excluded from consultations at the municipality level if their representatives had not been elected to office. Several civil society and business actors had similar concerns. "The decision-making process must be consultative and participatory, but palika [municipality] representatives do not like participatory approaches," said a leader and entrepreneur in Okhaldhunga. Reportedly, wider consultations on reconstruction-related matters were only held at district levels, but not municipal levels. Despite limited involvement, local political leaders generally showed good awareness of reconstruction progress and specific rebuilding-related needs in their areas.

## Reconstruction remained too centralized, complained local governments.

Despite some devolution of powers to the local governments and regular consultations between the NRA and local actors, the centralized decision-making process was seen negatively by the districts and local governments. District-level stakeholders complained about being increasingly side-lined in reconstruction and their responsibilities being reduced to forwarding policy decisions from the central level to the local level, and data from the local level to the central level. Local government representatives also complained that all important decision-making and implementing powers remained with the NRA and that the roles given to local governments were limited, subordinate, and managerial in nature. In Bhaktapur, a ward member said, "It looks like they [the NRA] have given us rights, but in reality, it is not like that; we have to work according to them." A local representative in Sindhupalchok lamented that their role was simply 'a facilitating role.' Another representative in Gorkha similarly criticized, "Our role is defined by orders that trickle down to us."

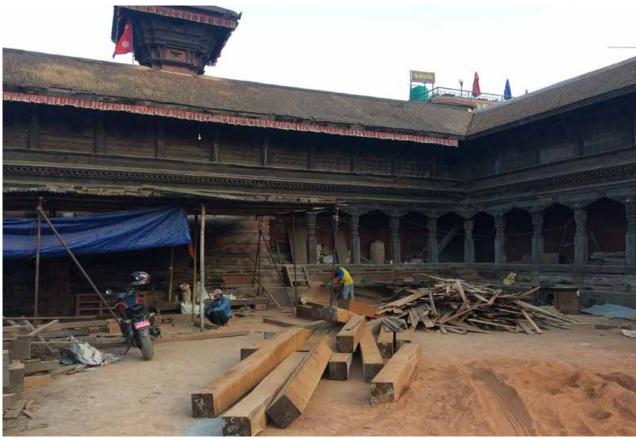
Local governments specifically argued that they should have had a more central role in determining the beneficiary lists and resolving grievances because they have an actual sense of damage and needs. They pointed to the multiple errors in these lists and cited their exclusion from the process as the main reason.84 The ward and municipality-level presence of NRA-deployed engineers and technical employees alone was not considered enough to decentralize the government's earthquake response. A local representative in Gorkha said they could have better resolved grievance cases, echoing similar opinions of representatives in other areas. "Data errors that have impeded reconstruction efforts could have been reduced if the NRA had allowed local representatives to lead the verification process [for grievance cases]. The NRA introduces errors, because of which locals continue to suffer."

<sup>81</sup> These were informal leaders at the time due to the absence of locally elected representatives before 2017.

<sup>82</sup> The Asia Foundation and Democracy Resource Center Nepal (2015).
Aid and Recovery in Post-Earthquake Nepal: Independent Impacts and Recovery Monitoring Phase 1 – Qualitative Field Monitoring (June 2015). Kathmandu and Bangkok: The Asia Foundation And: The Asia Foundation and Democracy Resource Center Nepal (2016). Nepal Government Distribution of Earthquake Reconstruction Cash Grants for Private Houses – Independent Impacts and Recovery Monitoring Thematic Study (July-August 2016). Kathmandu and Bangkok: The Asia Foundation

<sup>83</sup> See IRM-2 and IRM-3 qualitative reports, accessible on https://asi-afoundation.org/where-we-work/nepal/irm-project/

<sup>84</sup> This confirms findings of DRCN research conducted on the topic of disaster governance in early 2019: Democracy Resource Center Nepal (2019). "The Roles of Local Governments in Disaster Management and Earthquake Reconstruction". April 2019. Available at: https://www. democracyresource.org/reports/the-roles-of-local-governments-in-disaster-management-and-earthquake-reconstruction/



Carving of woods for reconstruction of heritage sites in in Bhaktapur, 2019. Photo by Kiran Bhattarai

## Data management remained problematic in many areas.

Earlier, data mistakes in assessments and housing grant beneficiary lists were common due to technical and logistical difficulties. Over time, data management seems to have improved with standardized formats and more engineers having access to computers. Yet, local government representatives and engineers still pointed out that data management had been challenging due to a lack of equipment, consistency, and information-sharing. Local-level actors were often unaware of the latest reconstruction and grievance numbers in the area; they may have collected and forwarded data, but compilation was done at district and central NRA levels without necessarily passing information back down to local levels. In a couple of municipalities, handover from one technical officer/engineer to the next had not (yet) happened, as records were not passed on to the successor. Data was mostly recorded manually at the ward level, and also sometimes at municipal level, raising questions about data safety. In some places, mistakes were reportedly introduced when data was uploaded without second-level verification, although the presence of local governments was reported to have improved data verification. Some respondents said that better data management systems (such as, fully computerized systems) may have helped with both data records and sharing, thus preventing mistakes.

## Coordination has improved but communication gaps persisted.

Despite complaints about their executive roles, the presence of elected representatives was observed to have improved coordination and information dissemination at the municipal level (see above). Yet, coordination between local and central levels remained one-sided and slow, according to local stakeholders. Stronger coordination and communication channels could have facilitated reconstruction efforts, said local stakeholders, who found it difficult to get actively involved in reconstruction within the centralized response framework. A GMALI district representative echoed other local voices, saying that main coordination hurdles were, "the slow process of delivering the decisions of NRA to the offices at the local level. It has slowed the reconstruction progress in the district. There is no substantial coordination between GMALI and local government." A ward chairperson in Okhaldhunga also complained about communication gaps, saying it made it difficult for local representatives to share accurate information. "We have to provide answers to the public and be accountable to them. We have to face them, not the center."

Across all districts, local governments complained that previous changes to NRA policies on grants and reconstruction were not communicated to them in a timely and clear matter, and that they were not adequately consulted in the process. Awareness of newer policies was weak, such as the NRA's classification of vulnerable groups and top-up grants for vulnerable groups (Chapter 3.3). Similarly, communication of certain processes was inconsistent, such as around retrofitting, leading to limited local level understanding of, and support for, retrofitting (Chapters 3.2.2 and 2.4). In the urban district of Bhaktapur, communication and coordination gaps between the Department of Archaeology, the municipality office, and the NRA were additional challenges for urban households trying to rebuild (Chapter 2.5).

#### Limited involvement of local governments in reconstruction may be a missed opportunity for future disaster management and response.

The change in Nepal's governance system towards federalism has provided an opportunity to revise disaster response mechanisms and roles of various levels of government involved. The new Constitution of Nepal, promulgated shortly after the earthquake, lists 'disaster management' as an exclusive competence of local governments, while Section 11(2) of the Local Government Operation Act (LGA) enumerates disaster management-related functions. 85 Consequently, since assuming office in 2017, local governments have started drafting 'disaster management acts', setting up revolving funds, making annual plans, and forming municipal and ward-level disaster response committees. However, disaster-related policies have not featured prominently in the priority of local governments, with only a small number of local units legislating disaster-related laws and implementing

annual policies. Municipal disaster policies have also not taken into consideration lessons emerging from the earthquake reconstruction phase. <sup>86</sup> In addition, the specific division of responsibilities in disaster responses between central, provincial, district, and local levels have not yet been clearly defined.

In IRM-5 (November 2019), local governments had limited understanding of disaster management. They had prepared disaster acts and were also taking some measures to prepare for disasters by establishing disaster emergency funds (ranging between NPR 1,500,000 [USD 12,500] and 10,000,000 [USD 83,000]) for those affected by disease, floods, lightening, fire, or other disasters (by providing around NPR 25,000 [USD 208] to affected households), or by purchasing ambulances, fire engines, tents, helmets, and other equipment, and forming response teams.87 Yet, some local governments pointed out that they lacked resources, expertise, and preparations to effectively respond to disasters. Disaster committees were established, but inactive and were seen to only play a role after a disaster strikes. "We are facing immense problems regarding disaster management because of resource deficits. The municipality does not have sufficient financial resources, nor the expertise, to deal with disasters. We require more trainings on disaster management at the municipal and ward levels and we need financial support [....], resources, and better equipment," said a government officer in Sindhupalchok. Most local governments did not have concrete plans for how to respond to disasters beyond providing immediate financial or material relief. Most ward-level representatives said they would wait for instructions from the municipal level.

Perhaps, had local actors been more involved in the reconstruction process – as key actors with strong two-way communication channels between central and local levels, rather than as vessels for communicating central level decisions – these experiences could have been beneficial, not only for reconstruction, but also for disaster preparedness and for future disaster responses.

<sup>85</sup> Under the LGA, there are twelve specific disaster-related authorities of local governments, including: making plans and policies for disaster preparedness, mobilizing municipal police for rescue and relief, mapping of risk areas and relocation, coordination with provincial and federal governments and non-governmental organizations, and data management and research.

<sup>86</sup> DRCN (2019). "The Roles of Local Governments in Disaster Management and Earthquake Reconstruction". April 2019. Available at: https://www.democracyresource.org/reports/the-roles-of-local-governments-in-disaster-management-and-earthquake-reconstruction/

<sup>87</sup> These findings confirm DRCN's earlier findings: DRCN (2019). "The Roles of Local Governments in Disaster Management and Earthquake Reconstruction". April 2019. Available at: https://www.democracyresource.org/reports/the-roles-of-local-governments-in-disaster-management-and-earthquake-reconstruction/



Photo: Prabhat R Jha

This chapter looks at the sources of finance, beyond the housing grants, that people affected by the earthquakes turned to for reconstruction or repair of their houses. It discusses patterns of borrowing, including most common lenders, access to soft loans, and some of the actual and potential longerterm impacts of debts and exploitative lending

arrangements. The chapter also examines other coping mechanisms, such as the sale of assets and changing livelihoods. By examining how long-term impacts on livelihoods affect people's ability to finance reconstruction and recover, this chapter offers insights into the financial impacts and recovery from the earthquakes.

# 4.1 Borrowing practices and sources of lending

#### Key findings: Borrowing, sources of lending, and debt

Most earthquake-affected households covered their rebuilding costs by taking out loans. As reconstruction costs were high and generally exceeded the costs of the housing grant, borrowing was an extremely common coping strategy. Consequently, both, borrowing and debts have increased over time.

Borrowing patterns and practices varied between rural and urban areas. In rural

areas, borrowing was more common, but people borrowed comparatively smaller, although still significant, amounts at high interest rates from local cooperatives, moneylenders, and microfinance institutions. In urban areas, fewer people took out loans, but loans were larger and usually taken from formal sources of lending at lower interest rates. People in rural areas struggled more to repay debts, despite borrowing smaller amounts.

Microfinance institutions have become a prominent source of lending, mostly targeting rural women, but relying on exploitative practices to create revenue. An increasing number of people borrowed from microfinance groups, especially in Gorkha, but they complained about coercive rules and high interest rates. Researchers met several people who had to take multiple loans to pay interest for one microfinance group, with a loan from another.

Some cooperatives were providing 'home loans' at lower interest rates, trying to help members rebuild and recover. As in previous years, very few people borrowed from banks for reconstruction purposes. Those who did take bank loans often did so for purposes other than reconstruction, but used some of the loan to rebuild their house.

Access to government-subsidized lowinterest 'soft loans' was extremely limited. Major barriers to accessing soft loans were the reluctance of banks to provide soft loans without collateral or other assurances, and the bureaucratic process to receive such loans.

Many earthquake-affected households were stuck in cycles of debt and borrowing, especially those from poor and marginalized Dalit and indigenous communities. Many people still hoped to receive subsidized loans from the government to help them repay loans. In the meantime, most were unsure how to repay loans and said they would have to rely on employment overseas. The sale of land as a coping strategy had become more common, especially in urban areas and bazaar towns.

#### 4.1.1 Borrowing patterns

Access to financial resources beyond government grants remained crucial for successful housing recovery.

Although access to the housing grants improved and most eligible households eventually received at least part of the grant funding (Chapter 3.1), housing grants were not enough to fully finance a rebuild, and were never intended to be. Given that the costs of reconstruction far exceeded the amount of the government housing grants (Chapter 2.3), access to additional financial resources primarily determined people's ability to rebuild successfully. Households with grants that managed to successfully rebuild did so by supplementing their housing grants with either their own funds (whether savings or remittances from migrant labour) or by accessing financial services, such as banks, cooperatives, and other forms of borrowing, as discussed in this chapter.

On the other hand, households without access to supplemental income or formal financial services struggled to rebuild or went into debt. A representative of United Multipurpose Cooperative Limited in Lisankhu Pakhar, Sindhupalchok, said, "Rebuilding is difficult because expenses for construction are bigger than earnings of the survivors." Respondents in all visited districts agreed that economic status of

earthquake-affected households had a major impact on their ability to rebuild.

DRCN observed that there is an increasing gap between households who are able to rebuild and those who cannot rebuild without getting into high levels of debt (see below). The latter typically includes vulnerable groups, such as the poor, households in remote areas, Dalits, single women, elderly, and other historically marginalized groups who are also more likely to still remain in temporary shelters nearly five years after the earthquakes (Chapter 2.6). For these groups, many of whom are exposed to structural and social discrimination, the existing government grants were not sufficient to rebuild and they had so far been unable to access subsidized loans. While the housing grant and top-up grants for vulnerable households were helpful, they were not enough to overcome financing gaps. In urban areas, the poor faced even higher costs of rebuilding and more were found to still live in their old, partially damaged houses, unable to rebuild because their incomes could not cover the cost of reconstruction (Chapter 2.5). Most earthquake-affected households were unable to access subsidized loans that would have helped cover for their rebuilding costs (Chapter 4.1.3).

The number of earthquake-affected households which have taken loans to rebuild their houses has increased.



A couple collecting water in Sindhupalchok, 2016. Photo by Prabhat R Jha

As highlighted since the beginning of the IRM research, borrowing was the main source of finance for reconstruction, besides the housing grants. As early as June 2015, people were taking out loans to pay for the construction of temporary shelters and new houses. By late 2016 and early 2017, more people had borrowed to cover reconstruction costs, while most said they planned to borrow in the future, after receiving their housing reconstruction grants and beginning reconstruction. Housing reconstruction grants after the earthquakes (in November 2019), the majority of interviewed households had followed through on their plans and borrowed large sums to finish

reconstruction. In all four districts visited by DRCN researchers, the majority of households with housing damage said they borrowed money to supplement the housing grant in order to complete reconstruction of their homes. Many were now struggling to repay the loans and some even took loans to pay back other loans (see below). Borrowing was common before the earthquake for various purposes, but by IRM-5 (late 2019), it had become clear that most people took loans specifically to finance reconstruction, and that borrowing had increased since the earthquakes – both in frequency and amounts – to finance rebuilding. This raises questions about longer-term impacts on households now being heavily indebted, and their ability to financially recover.

Increasing numbers of affected households told researchers that they had never previously borrowed such a large sum at one time. Although the most commonly borrowed sum was NPR 150,000 (USD 1,244), researchers found that, in Gorkha,

<sup>88</sup> IRM-1 had found that 'people who suffered higher levels of housing damage tended to borrow more'. While some households were keen on waiting for clarity on government policies regarding grants and compensations before obtaining loans, others households, especially those in lower income groups without other options, were obtaining loans from local moneylenders, often at high interest rates. Dalit families in Okhaldhunga, for example, were found to have borrowed money at high interest rates as early as June 2015 to build shelters and new houses, expecting to receive compensation from the government that would allow them to repay these loans. The Asia Foundation (2015). Independent Impacts and Recovery Monitoring Nepal Phase 1 (June 2015) — Synthesis Report. Kathmandu and Bangkok: The Asia Foundation.

<sup>89</sup> The Asia Foundation and Democracy Resource Center Nepal (2017). Aid and Recovery in Post-Earthquake Nepal: Independent Impacts and Recovery Monitoring Phase 4 – Qualitative Field Monitoring (April 2017). Kathmandu and Bangkok: The Asia Foundation

<sup>90</sup> The IRM-5 quantitative household survey confirms this finding. See, The Asia Foundation and Interdisciplinary Analysts (2020). Aid and Recovery in Post-Earthquake Nepal: Independent Impacts and Recovery Monitoring Phase 5 – Quantitative Survey (September-October 2019). Kathmandu: The Asia Foundation

#### Case Study 4.1: A widowed woman with multiple debts

China Maya, 54, received the government's resettlement grant to buy land. She and her family, as well as half a dozen other families, were displaced from their village at the bottom of a tall rocky hill, after a team of geologists deemed it as unsafe. All of these families still cultivate their old land, but most live in new houses elsewhere by now.

China Maya bought a new piece of land with her resettlement grant and started building a house. She spent NPR 200,000 (USD 1,660) on the new house — a comparatively lower amount because her husband was a mason and his friends helped build the house. However, her husband recently died and she now lives alone in the new house, which is still not finished. The floor is yet to be levelled and the walls plastered.

Her husband's work as a mason was their only source of income. China Maya received the first tranche of the housing grant from the Red Cross, but no subsequent tranches due to 'irregularities,' she said. "We built the house borrowing money from local money lenders hoping that we would get the money [...] all I got was NPR 50,000 (USD 415) rupees. I have been paying NPR 50,000 interest for the loans I took to build this house," she added.



To pay back the interest of her loan, she joined microfinance groups, but she is now forced to pay installments to the microfinance institutions. "I borrowed money from my *maiti* (parents' home) to pay the installments. I am in deep debt. I have no income. I don't know how to pay back my loans. Even the remaining housing grant is not enough to pay back all the loans," she said.

"Had I got the housing grant on time, I would not have been in such a deep dept. I would like to ask the government to provide us loans, not grants, to come out of this debt," she says.

beneficiaries who had built two-room structures owed an average of NPR 200,000 (USD 1,660) and many individuals owed much larger sums, up to several million rupees, especially in the urban district of Bhaktapur, where people borrowed larger sums.

# The housing grants' tranche dispersal system and timing may have contributed to increased borrowing for reconstruction.

Previously, the IRM research found that many people started borrowing after the first tranche of NPR 50,000 (USD 415) was spent, in order to meet daily expenses—especially because it was distributed close to the Dashain festival, and the NRA made the announcement that beneficiaries would have to return the first tranche if they did not start rebuilding.<sup>91</sup> In 2016-2017, the research also found high levels of dissatisfaction among beneficiaries who had had taken loans because the distribution of the

housing grants was delayed. Most households with housing damage borrowed at high interest rates from informal sources. The local elections of 2017 further delayed distribution of housing grants, increasing the need of those rebuilding to seek greater amounts in loans.

In IRM-5 (November 2019), many of those interviewed thought the three-tranche system itself may have pushed beneficiaries toward additional financial burden. Housing grant beneficiaries repeatedly complained that the first tranche had not even been enough to pay masons and laborers, and so, many had taken out loans to cover these expenses.

<sup>91</sup> The Asia Foundation and Democracy Resource Center Nepal (2016). Aid and Recovery in Post-Earthquake Nepal: Independent Impacts and Recovery Monitoring Phase 2 – Qualitative Field Monitoring (February and March 2016). Kathmandu and Bangkok: The Asia Foundation



A Dalit ironsmith whose son and daughter-in-law committed suicide after the earthquake due to increased financial burden. Solukhumbu, 2016. Photo by Prabhat R Jha

A microfinance representative in Gorkha said, "When the government made it mandatory for the foundations to be built, or the recipient would have had to return the first tranche of the grant, people started looking for loans." In urban and semi-urban areas where debris removal was a necessary expense, the first tranche was spent before households could even complete the foundation or the damp-proofing course required to qualify for the second tranche. Mr. Jyakhwa, a ward chairperson in Bhaktapur, thought, "[T]he first tranche was not sufficient to demolish [damaged structures] and remove the debris ... if all the grant amount had been given at once, at least that sum would have helped to clear the debris."

The completion of one stage of construction is a precondition for the disbursement of funds for the next stage of construction. For example, if a beneficiary could not manage to finish the construction of the foundation and damp-proofing with the first tranche of NPR 50,000 (USD 415), then they would not be given the certification and recommendation necessary to receive the second tranche of NPR 150,000 (USD 1,243) toward raising walls. People in Gundu, Suryabinayak Municipality in Bhaktapur, told DRCN researchers during a group discussion that they felt the three-tranche system was

flawed because they were required to fulfill certain criteria in order to obtain subsequent tranches of the grant, but in order to fulfill these, they first needed more money. In other settlements, almost all of the beneficiaries who were yet to complete rebuilding said that they lacked funds and would require additional monetary support just to qualify for subsequent tranches of the NRA grants.

However, not all of those who had yet to finish rebuilding will be able to access additional finance. Many of those with access to finance will go into debt, from which they may not easily recover. Households may have rebuilt, but as findings of this research highlight, in the longer term, they will likely still suffer from the financial burden imposed on them by the earthquake and reconstruction process.

## 4.1.2 Sources of lending and interest rates

## Sources of lending varied between rural and urban areas and between districts visited.

In the three rural districts researchers visited, people relied primarily on microfinance institutions, local cooperatives, and local moneylenders, who lend at interest rates ranging from 10 to 36 percent per annum. In rural areas, the lack of access to banking services and a reluctance by financial institutions to provide services offered by the state – for example, subsidized loans underwritten by the state– resulted in a negligible number of subsidized reconstruction loans from commercial banks being distributed to beneficiaries. This also pushed beneficiaries toward informal financial arrangements, like borrowing from local moneylenders at exorbitant interest rates, to supplement the expense of rebuilding.

In contrast, in the bazaar areas of rural districts and in the urban district of Bhaktapur, many of those who borrowed were families with regular sources of income or with some land or property to put up as collateral. They accessed loans from commercial banks and financial institutions, rather than having to rely upon informal sources, like local moneylenders. For example, RK Tamang from Suryabinayak Municipality built a four-storey house that was partially financed by a bank loan of NPR 2,000,000 (USD 16,600), while KP Ranjitkar of Bhaktapur had borrowed NPR 3,000,000 (USD 25,000) from cooperatives and banks.

While microfinance institutions emerged as key lenders in Gorkha, cooperatives dominated in Sindhupalchok and Bhaktapur, and in Okhaldhunga, people mostly borrowed from local moneylenders. In one ward of Chautara Sangachokgadhi Municipality, Sindhupalchok, nearly 40 to 50 out of the 200 members (25%) of Udhbhav Savings and Credit Cooperative Limited had taken out loans for earthquake recovery purposes, while just 15 to 20 members out of 696 members (3%) of Kamal ko Phool Women's Multipurpose Cooperative in another ward of Chautara Sangachokgadhi had taken out loans for reconstruction. In Lisankhu Pakhar Rural Municipality, Sindhupalchok, 260 out of 316 members (82%) of Harisiddhi Women's Saving and Credit Cooperative had taken loans. In Okhaldhunga, where loans averaged between NPR 200,000 and NPR 300,000 (USD 1,660 - 2,500), local money lenders were the primary source, although microfinance institutions were also making inroads. In Gorkha, beneficiaries usually accessed loans from microfinance institutions, instead of cooperatives or commercial banks (see below).

Local cooperatives, moneylenders, and microfinance institutions were key sources of borrowing, particularly for poor households, despite high interest rates. In 2015-2016, the IRM research found that earthquake-affected households relied on close relatives as their main source of borrowing, although moneylenders, neighbors, and cooperatives, also commonly provided loans to them. Access to banks was still limited in rural areas at the time of the earthquake and people turned to sources of lending that were accessible and familiar to them. Over time, banks did not fill the finance gap in rural areas, allowing microfinance institutions and local lenders to thrive, despite charging high interest rates (see below).

In the districts visited during IRM-5 (November 2019), the most prominently accessible and visible lenders to earthquake survivors were microfinance institutions, local cooperatives, and local moneylenders, while relatives and friends had become less important sources of funds- likely because the amounts borrowed had increased. Except for one respondent, none mentioned having to provide collateral for a loan when borrowing from these sources, although microfinance institutions require group guarantees (see below). This was a primary reason why people continued borrowing from informal lenders, cooperatives, and microfinance institutions, rather than banks. As previous IRM reports already highlighted, most people in rural areas preferred borrowing without collateral and valued the flexibility many moneylenders and local financial institutions provide, in terms of repaying loans. Therefore, informal lenders were particularly important for poor households without enough property to put up as collateral, or the influence needed at commercial banks, in order to obtain subsidized loans from formal sources at relatively low interest rates. Wealthier respondents, and those in urban areas, were comparatively more likely to borrow from banks. In addition to a lack of collateral, limited financial literacy also prevented people from accessing banks and pursuing loans from formal lenders at lower interest rates.

Based on responses from those who had taken loans, as well as those providing loans, interest rates varied between 10 to 36 percent annually and averaged at around 15 percent annually for loans from moneylenders and cooperatives. Microfinance institutions charged interest rates ranging between 18 and 36 percent per annum. In most instances, beneficiaries borrowed anywhere from NPR 100,000 to NPR 600,000 (USD 829 - 5,000) from these sources. Some individuals interviewed had borrowed much larger sums, but on average, people said they

#### Case Study 4.2: The perspective of a microfinance administrator in Gorkha

According to a microfinance administrator in Gorkha, "Our sisters [women in Gorkha] have been helped greatly by microfinances. They spent the first tranche [of NRA housing grants] on shopping in Gorkha Bazaar, so when they faced the mandatory provision for building the foundations of their houses, microfinances helped them out. People panicked – and that was when the largest

volume of loans was distributed by microfinances."

He added that households required funds in addition to the NRA housing grants. "Although they would finish building, they would borrow from multiple institutions, thereby increasing their debt burden." According to him, in the areas serviced by microfinances based in Gorkha Bazaar, the rate of loan defaulting is nearly 25 percent.

had borrowed a total of NPR 200,000 to 300,000 (USD 1,660 - 2,500) to finance reconstruction.

Microfinance institutions had become more a prominent source of lending, mostly targeting rural women, but they rely on exploitative practices to create revenue.

In previous IRM research rounds, very few households said they borrowed from microfinance institutions. By IRM-5 (late 2019), increasing numbers said they had taken loans from 'microfinances' – as they are commonly called – but their rules and practices were perceived by borrowers as exploitative.

Microfinance institutions charge high interest rates – usually between 18-36 percent annually. They typically provide loans for 'household expenses,' even to those taking loans for rebuilding, rather than 'housing loans,' as the latter typically had lower interest rates. Microfinance institutions were found to lend to people as long as the debtor was able to show a source of income, even if it was in the form of goats and chickens; however, they require group guarantees. A group of 10 people, usually women, had to take an oath as group guarantors – *samuhik jamani* – for the borrower. A base installment was set to be paid every month, to include the interest amount, service charge, and some savings for the group.

Rural women seem to be the main targets of microfinance institutions, and often end up joining with neighbors and friends. The institutions then use social pressure to retain members who might wish to leave. A woman is unable to leave a microfinance institution until and unless each member of the group has paid their debts, even if she herself owes no

monetary debt to the institution. Typically, a woman who wants to leave must first find a replacement (Case Study 4.2). People widely complained about these practices, but have continued to borrow from microfinance institutions, with many taking out more than one loan from such institutions.

As a journalist in Okhaldhunga explained, "Microfinances are traps. Lots of people take loans from these [micro] finances. If one member fails to pay a single installment on time, the other members have to pay back the debt." This arises from the common culture among women's savings microfinance groups of creating groups comprising close-knit members of a family or neighbourhood, and lending sums only with guarantees made by every member. In Barpak, the ward office, as the smallest unit of the local government, acts as the guarantor for some borrowers. An elected representative in Nareshwor of Gorkha Municipality said that microfinances charged the total amount that would have accrued as interest, even when members tried to pay off their entire debt ahead of schedule.

Microfinance institutions were found to provide loans to earthquake-affected households in Sindhupalchok, Okhaldhunga, and Gorkha. They were most prominent in Gorkha and least prominent in Bhaktapur, where people more commonly borrowed from formal sources, such as cooperatives and banks. Some microfinances in and around Gorkha Bazaar knowingly lent to debtors who were borrowing from multiple microfinance institutions – sometimes from one to pay the other. Members wishing to leave a group were actively dissuaded from doing so, often by facilitating the borrowing of even greater sums.

#### Case Study 4.3: Multiple debts to rebuild house

LB Darji took out a loan of NPR 200,000 (USD 1,660) from a microfinance group and local money lenders to rebuild his home destroyed in the earthquakes. He explains that he could negotiate the repayment timeline of his loan with the local lenders, but did not have the same flexibility with the microfinance group, which has a system of group accountability. He sold his buffalo to place a deposit on his installment. Both the money lenders and the microfinance group charge him 24 percent interest per year. He estimates that it cost around NPR 500,000

(USD 4,200) to build a house in his village, as the transport of material from the district headquarters significantly raised the price of cement and iron rods. As a result, many of his fellow villagers have indebted themselves in order to cover the costs of reconstruction. Not only was the material expensive, but so was the labor in the first three years following the earthquakes, as demand was high. A mason's daily wage is today about NPR 500 (USD 4), but was as high as NPR 1,000 (USD 8) per day, in addition to three meals, back then.

A Nepali Congress committee member from Gandaki Province, Gorkha, who operates a microfinance institution herself, admitted, "Microfinances are driving women to financial ruin. They charge compound interest of up to 36 percent per annum or more sometimes. Many women have fled their homes after not being able to pay the loan and the interest. These microfinances form women's groups and ensnare the members to 'sit' in the group by making them take oaths and prayers."

According to an administrator at a popular microfinance institution in Gorkha members were mostly saving money before the earthquakes because they did not need loans. Since the earthquake, however, they have started taking loans for reconstruction. He also explained that new recruits were kept on a six-month probation until they brought 300 new members into savings groups - but from that number, at least 151 must be converted into borrowers before the new recruit may secure a paid position. This reveals that the emphasis of microfinance institutions is often much less on enabling savings among members, than on creating a revenue stream for the lending institution in the form of various service fees and interests. According to the microfinance representative, his office took NPR 300 million (USD 2.5 million) from the head office since the earthquakes of 2015 to lend to 'savings groups' primarily comprising of women without cash income. It had already retrieved most of this amount, but had yet to return approximately NPR 53 million (USD 440,000) of the NPR 300 million.

Some cooperatives provided low-interest 'home loans' for reconstruction.

There was at least one local cooperative in Bhaktapur district that provided special loans, at lower interest rates, for people needing to rebuild their houses. Researchers met representatives of one such cooperative (Case Study 4.4), but others also reportedly provided similar loans to members in Bhaktapur and Survabinavak Municipalities. In contrast to rural Nepal where microfinance companies were found to be aggressively expanding, in Bhaktapur, because of the presence of better financial services, like community-based cooperatives, not many people were taking out loans they could not pay back – nor were people in Bhaktapur subjected to aggressive tactics of microfinance institutions. On the other hand, there were also more people who had still not rebuilt and continued to live in shelters or badly damaged houses because they could not access additional funds or loans to rebuild (Chapter 2.5).

Some cooperatives thought they could and should have played a bigger role in providing home loans to earthquake-affected households and that there should have been better coordination between banks and cooperatives. A representative of Hari Siddhi Women's Savings and Credit Cooperative Limited in Lisankhu Pakhar Rural Municipality, Sindhupalchok, said, "The demand for home loans increased after shareholders started building new houses in the ward. The lesson learnt from the earthquake relating to the cooperative is that we have to increase the number of shareholders so we could provide the appropriate sum as home loans to the public. Cooperatives should have coordinated better with commercial banks to provide sufficient sums." United Multipurpose Cooperative Limited, another cooperative in Lisankhu Pakhar, said they issued





- 1. A carpet weaver who lost her father in the earthquake. Sindhupalchok, 2016. Photo by Prabhat R Jha
- 2. Carpet weavers in Sindhupalchok, 2016. Photo by Prabhat R Jha

home loans of up to NPR 200,000 (USD 1,660) at 16 percent interest rates per annum to their members who needed to rebuild.

### Very few borrowed from banks for reconstruction purposes.

Access to government low-interest 'earthquake relief home loans' was very limited (Chapter 4.1.3). However, several people took other types of bank loans, which they may have used for rebuilding. Bank officials speculated that loans being borrowed under other headings, such as 'business loans,' were being appropriated for rebuilding. Households spend a portion of these loans for the purported task, presented proof of expenditure before the banks, and utilized remaining funds to rebuild homes. A branch manager at Laxmi Bank in Sindhupalchok said, "Nobody of Lisankhu Pakhar Rural Municipality has borrowed under the earthquake relief home loan yet.

However, they have taken other types of loans, like business loans, agricultural loans, and education loans. The surplus funds from the other type of loans may have been used." A manager at Nirdhan Utthan Bank Limited also heard about this practice. "Our members have increasingly borrowed agriculture loans... The surplus that remains from agriculture loans has been used to rebuild homes. In principle, this is not allowed."

However, overall, borrowing from banks was not common, despite charging lower interest rates than informal lenders. Bank products were not available to all earthquake victims, and it was more common in urban areas, especially in Bhaktapur district. People generally explained that not having collateral prevented them from accessing bank loans. This was the case in both rural and urban areas. Some of those who did have property feared putting up their land as collateral, especially in urban areas where borrowing

#### Case Study 4.4: A local cooperative provides loans for reconstruction

Siddhi Ganesh Cooperative in Bhaktapur Municipality is operated by local residents. The Cooperative took some positive initiatives to support earthquake-affected members in reconstruction and rehabilitation.

After the first earthquake on April 25, 2015, their office reopened within days to keep earthquake victims' cash and valuables safe. The cooperative also provided an immediate NPR 10,000 (USD

83) in relief for funeral rites.

Later, the cooperative started providing loans at between 8 and 11.5 percent interest per annum to help finance reconstruction – a lower rate than the 16 percent reportedly being charged by other banks and financial institutions in the area. Around 95 households obtained loans for reconstruction purposes from Siddhi Ganesh Cooperative.



A woman in front of her shelter in Sindhupalchok, 2016. Photo by Prabhat R Jha

from banks was more common. Mr. Silpakar from Bhaktapur was in the difficult position of having to decide whether to put up as collateral the very land on which their houses sit. "What are we to do if the bank takes away the only home we have?," Silpakar asked.

### 4.1.3 Access to government soft loans

#### Access to government-subsidized lowinterest 'soft loans' was extremely limited.

In 2017, the NRA initiated an integrated procedure for its beneficiaries to access subsidized loans at two percent interest for up to NPR 1,500,000 (USD 12,400) outside Kathmandu valley, and up to NPR 2,500,000 (USD 21,000) inside the valley, on the basis that collateral was presented. This scheme is called the Earthquake Relief Home Loan Scheme. With only 1,300 people having obtained the loan by August 2018<sup>92</sup>, the NRA ended this scheme in 2018 and instead introduced a new concessional loan policy, effective since November 2018, under which the government would underwrite five percent of

the interest rate on concessional loans of up to NPR 300,000 (USD 2,500) for those unable to rebuild due to lack of funds. In this case, banks and financial institutions were allowed to 'scale up profits by up to two percent on their base rate.'93 Borrowers were required to pay back the loan within five years.

In practice, the government-backed soft loan schemes for earthquake victims through commercial banks were ineffective in helping those who most needed low-interest loans. Across all districts, key informants agreed that hardly anyone was able to access these loans and researchers did not meet anyone who had received it, despite there being interest to apply among earthquake-affected households.

The main barriers to accessing soft loans were banks' reluctance to provide them without collateral or other assurances, and the lengthy process to receive such loans.

From the beginning, banks were reluctant to provide soft loans without collateral and assurances from the government.<sup>94</sup> IRM-5 (November 2019) indicated that the demand for collateral, and banks' reluctance

<sup>92</sup> https://reliefweb.int/report/nepal/nra-ends-concessional-loans-rebuild-homes

<sup>93</sup> https://reliefweb.int/report/nepal/nepal-rastra-bank-orders-banks-disburse-concessional-loans-quake-victims

<sup>94</sup> The Asia Foundation and Democracy Resource Center Nepal (2017). Aid and Recovery in Post-Earthquake Nepal: Independent Impacts and Recovery Monitoring Phase 3 – Qualitative Field Monitoring (September 2016). Kathmandu and Bangkok: The Asia Foundation. Pp.14

to disburse soft loans without adequate assurances, continued to be key factors in banks not lending beneficiaries. Elected local representatives reported that, although beneficiaries knew about the government low-interest loans, no beneficiary obtained them. A ward chairperson in Chautara, Sindhupalchok, explained, "Beneficiaries knew about the soft loans, but nobody borrowed because the bank was reluctant to provide subsidized loans." A municipal vice-chairperson in Sindhupalchok said, "I do not know of anyone borrowing from the earthquake relief home loans." A branch manager at Nepal Rastra Bank in Sindhupalchok also did not know of any earthquake-affected households who had applied for earthquake relief home loan in all of Sindhupalchok district. "This is because of the lengthy government process of getting the loan," he asserted.

Several people interviewed said they were denied access to the government loan scheme for earthquake-affected people. Mr. Giri from Sangachok in Sindhupakchok said, "We had approached Nepal Bank, but they denied us a loan, saying there were no more quotas left under the scheme. They said they would call us, but they never called back." A Dasnami farmer from Chautara, Sindhupalchok said, "We approached Nepal Bank Limited to borrow from the earthquake relief home loan scheme,but they told us that there were no more quotas left." The situation was the same in urban districts, despite having a higher density of banks. Respondents in all four districts told researchers it was difficult – if not impossible – to access the government soft loans.

Knowing someone at the bank was seen to qualify as assurance and make access to earthquake home loan schemes, and to bank loans in general, easier. Multiple respondents in Bhaktapur indicated that only those with influence at banks and financial institutions would be able to borrow, even with collateral to put up against loans. In instances where beneficiaries exhibited confidence that they could acquire such loans, they explicitly mentioned their route of access to such loans - a son employed at a bank, or other relatives with influence. A ward secretary in Bhaktapur Municipality said that 13 or 14 households had obtained recommendation letters from his office to apply for the loan, but he heard that only one person – a government employee of the officer level - had received a loan at the subsidized two percent interest rate.

Most people had heard about the government soft loans, but did not know exactly how to access them. This lack of knowledge, combined with actual difficulties in accessing the loans, may have deterred people from applying (although many of those that did try to apply were rejected, as described above). According to the manager of the Chautara branch of Nepal Bank in Sindhupalchok, beneficiaries did not acquire soft loans because of the lengthy application process as well as lack of information about the loan. In Okhaldhunga, people were aware of the scheme, but had not seen it implemented and asked researchers about the specifics of accessing it. Ms. Thapa, aged 21, a new mother and local government employee in Gorkha Municipality, said, "Financial literacy was low in my settlement, because of which my family is stuck with loans taken against high interest rates. My husband goes back and forth as a migrant laborer to Saudi Arabia, but the remittance he sends is barely enough to repay the interest on the loan."

Limited financial literacy, insufficient information about how to access government loans, and the reluctance of banks to provide loans to unknown and poor beneficiaries, has likely contributed to increased indebtedness and vulnerability among earthquakeaffected people.

### 4.1.4 Debts and repayment of

Earthquake-affected households entered cycles of debt and borrowing, with increased debts. Some took loans to pay back other loans.

As borrowing increased in frequency and amounts, and interest rates were often exorbitant, many households struggled under increased debt burdens incurred by reconstruction. Most worried about how to repay large and multiple loans (see below). Some even took new loans to pay back older ones. Researchers met several borrowers who had entered into a cycle of debt, wherein they take loans from multiple financial institutions, sometimes using money from one to repay the interest accrued by another. For example, a resident of Patiswara, Gandaki Rural Municipality in Gorkha, took out a loan of NPR 200,000 (USD 1,660) from a microfinance at the rate of 18 percent per annum, to be paid over two years. She took an additional loan of NPR 75,000 (USD 622) from a local bank, for which she pays an installment of NPR 8,000 (USD 66) per month, and another loan from a cooperative group at an interest rate of 24 percent per annum.

### Case Study 4.5: A family rebuilt by using the housing grant and selling land

Badri Narayan, 72, was living with his family of eight members in an old house in Bhaktapur before the earthquakes. The house was completely damaged by the earthquakes, and the family rebuilt sooner than others in the area. "We built quickly. Where would we stay if we didn't rebuild?," he asked.

The family financed their new house with the housing reconstruction grant and by selling some land. Badri said that he had spent around NPR 3 million (USD 25,000) on rebuilding his house. While he received all tranches of the housing

grant, he did not receive the completion certificate because he had deviated from the original design by adding one more floor. To receive a subsidy from the municipality, he had to use traditional bricks, traditional windows, and tiles.

According to Badri, local cooperatives are providing loans at low interest rates to those having to rebuild. He also said that many, like himself, are able to rebuild only after selling ancestral land. Others cannot rebuild at all because of family disputes or insufficient financial resources.

#### Many households were unsure how to pay back loans or hoped to rely on employment overseas.

Most people hoped to increase their incomes (Chapter 4.2) to pay back loans. In some districts, the possibility of finding foreign employment emerged as a key alternative to finance the repayment of loans. However, going abroad also requires more cash, which beneficiaries already in debt may not have access to. As Mr. BK of Gaihrigaun in Barpak, Gorkha, said, "I have worked in Malaysia and Saudi Arabia before, but I am afraid to return abroad because it requires even more money."

Especially in rural Okhaldhunga, a large number of indigenous Janajati and Dalit beneficiaries interviewed by DRCN mentioned the need to travel abroad for employment in order to repay loans taken for rebuilding homes. For example, BB Tolange and G Tolange from Molung Rural Municipality in Okhaldhunga, who had borrowed from local financial institutions or bought construction material on credit from local hardware shops, want to send their sons abroad for employment, but lack the funds to do so. This created the possibility of pushing their families further into debt because, without additional income, they will not be able to pay back loans, but to send their sons abroad to earn money, they will have to take additional loans. Sarada, also from Molung, sold 'prime land in Rampur Bazaar' to finance the reconstruction of her home, but she has outstanding debts. Her husband, who spent eight years in Malaysia as a migrant laborer, was preparing to go to a Middle Eastern country to help repay the debts. Similarly, NB Ramtel of Sunkoshi Rural

Municipality in Okhaldhung is returning to India to earn the money needed to repay his debt, while his neighbor, LB Sarki, is preparing to go to UAE.

### Some beneficiaries sold land to pay back loans taken for reconstruction purposes.

In 2015-2017, very few people had sold land to pay for reconstruction or to cover other expenses incurred by the earthquakes. Although few people overall had sold land for reconstruction, researchers noticed an increase in households mentioning having sold land to finance rebuilding, or planning to sell land to pay back debts.<sup>95</sup> The sale of land was more common in and near urban areas, where the value of land is higher than in remote rural areas.

Many beneficiaries in Bhaktapur sold ancestral land because its high market value would compensate for the high cost of building in their urban setting. The commonly used phrase *ghar dhalan*, *jagga chalan* – "a new piece of land sold for each new floor of the house" – succinctly describes this practice. People in urban areas were also more likely to sell land to pay back loans. Many initially took loans to rebuild and when failing to save enough money from other sources to pay back loans, resorted to selling land. Researchers met several people in Bhaktapur and Suryabinyak Municipalities who had recently

<sup>95</sup> The IRM-5 households survey also saw an increase in the shares who have sold land, which have doubled since IRM-4, although overall less than 10 percent said they had sold land. See, The Asia Foundation and Interdisciplinary Analysts (2020). Aid and Recovery in Post-Earthquake Nepal: Independent Impacts and Recovery Monitoring Phase 5 — Quantitative Survey (September-October 2019). Kathmandu: The Asia Foundation

sold land to pay back loans, such as Mr. Lama in Suryabinayak, who sold the land where his old damaged house stood for NRP 600,000 (USD 5,000) to pay back a share of his loans taken to build a new house on his agricultural land closer to the road.

In rural areas, most beneficiaries who reported that they sold land to rebuild, did so in semi-urban bazaar areas. "We built our house by selling our prime land in Rampur Bazaar," said Ms. Tolangi from Okhaldhunga. Researchers also met another man in the same place who was planning to sell his land in Rampur Bazaar to help build his house. Mr. BB Tamang, from Chautara in Sindhupalchok, sold 10-annas, or approximately 318 square meters, of his land in the semi-urban settlement to rebuild his house. Mr. Khatri, also in Sindhupalchok, sold six ropanies of land (approximately 3000 square meters) at NPR 25,000 (USD 207) per ropani, to pay back a loan (Case Study 4.5).

The sale of livestock, which had been more common in the early years after the earthquake, seemed to return to normal levels of sale for cash by IRM-5 (late-2019). The sale of livestock for household expenditure was more common than the sale of land. Researchers met with some individuals who had sold livestock for income purposes, such as Ram Sharan Thapa of Suryabinayak, who sold a cow for NPR 20,000 (USD 166). However, very few of them linked the sale of livestock to reconstruction.

#### People still hope to receive subsidized loans from the government to help them repay loans.

In Prapcha and Rampur in Okhaldhunga, Dalit communities had managed to obtain loans to pay for reconstruction, but many now found themselves needing to take out additional loans to repay installments on the first ones. "Last time, I sold my buffalo to pay an installment. The money I got from the sale was not enough, so I had to borrow more money to complete the payment," explained LB Darji. Many other people in similar situations were hoping to receive subsidised loan schemes from the government, which have not yet materialised. Okhaldhunga, people expected government subsidized low-interest loans as early as IRM-1 (June 2015), and took out large loans at high interest rates early on, expecting to repay them after accessing lowinterest loans.96 This expectation never fully went away. In other districts, people were less optimistic about receiving such loans, but all agreed that lowinterest loans would help them pay back other loans and help them recover more quickly from the earthquakes.

### Some families struggled to repay loans, as they did not receive the housing grant.

Housing grant beneficiaries, like Ms. Sarki and Mr BK, from Molung Rural Municipality in Okhaldhunga, struggled to repay loans obtained from

### Case Study 4.6: Earthquake reconstruction debt adds to pre-existing debts

In Sindhupalchok, the *theki* system charges interest at 36 percent per annum on the principal loan, although the borrower only receives 90 percent of the sum, as was 74-year-old, Resham Bahadur Khatri's, experience. Twelve years ago, Khatri borrowed NPR 100,000 (USD 829) at 36 percent per annum from local money lenders to send his son to Malaysia in search of work. The moneylender only paid him NPR 90,000 (USD 746), but he had to pay interest on the entire sum. Eventually, the loan, including interest, had reached NPR 300,000 (USD 2,500). His son

managed to pay back NPR 100,000 (USD 829) of it, but since then has been out of touch.

While Khatri continued to chip away at the debt, the earthquake hit his home. He managed to rebuild his house with the housing grants, but had to borrow further to replace his cattle that were killed in the earthquake, and to pay for daily expenses and necessary purchases. He sold six ropanis of land at NPR 25,000 (USD 207) per ropani, but still has to pay back NPR 30,000 (USD 250) of debt.

<sup>96</sup> The Asia Foundation and Democracy Resource Center Nepal (2015). Aid and Recovery in Post-Earthquake Nepal: Independent Impacts and Recovery Monitoring Phase 1 – Qualitative Field Monitoring (June 2015). Kathmandu and Bangkok: The Asia Foundation

local moneylenders and microfinance institutions. They hoped that government grants would enable them to repay their debts in full, but now realized that would not be possible. "We took a loan thinking we will soon receive the housing grant to pay it back," said Ms. Sarki. A year since her house was rebuilt, her NRA housing grant still had not come through. Researchers met several people who had taken loans to start rebuilding even before receiving the first tranche of the housing grant. For instance, Ram Chandra, from Suryanbinayak Municipality, took loans to rebuild even before receiving the housing grant, as did J. Lama from the same municipality. Similarly, the family of Ms. Simphal from Bhaktapur Municipality, built their house without waiting for the NRA grants. Some of them later received their housing grants, but others did not, which posed challenges for them, in terms of accessing funds to repay loans.

### People in urban areas were paying back loans with more ease.

People in urban areas were more likely to borrow from formal sources of lending, usually at lower interest rates than those of informal sources in rural areas (Chapter 4.1.2). Many families who had borrowed in Bhaktapur were economically sound enough to repay the loans, and had regular sources of income, or immovable assets to put up as collateral. Some had already paid back the loans, even large loans far exceeding the sums borrowed in rural areas. However, fewer people in urban areas were able to take out loans to begin with, delaying rebuilding there (Chapter 2.5). This finding further suggests that marginalized people in rural areas and the urban poor are struggling the most to financially recover from the earthquakes.

#### Households stuck in a debt traps are mostly from poor and marginalized Dalit and indigenous communities.

Households stuck in cycles of borrowing and debt are predominantly those without regular incomes, nor enough farmland to grow food and sustain themselves throughout the year. Across the districts, the poorest and the landless households, mostly from Dalit or indigenous *Janajati* communities, struggled



Damaged house in Suryabinayak, Bhaktapur, 2019. Photo by Lena Michaels

the most to financially recover from the impacts of the earthquakes and the subsequent costs incurred by reconstruction. This was the case both in urban and rural areas.

Elected representatives in the urban district of Bhaktapur said that people from the indigenous and Dalit communities were slow to rebuild because they lacked land ownership and the financial means to rebuild. "Mostly Tamangs and Dalits are not able to build and are still living in temporary arrangements," said a local politician. Mr. Twati, a Dalit mason, has not been able to rebuild his damaged house in Bhaktapur Municipality because he does not have enough savings or income to do so, and has no property to put up as collateral for bank loans. Ms. Nepali of Suryabinayak in Bhaktapur said that her family has not been able to rebuild on the land where they had been living because they are mohi<sup>97</sup> sharecroppers once removed - the family had an informal arrangement with the actual mohi of the

<sup>97</sup> The mohi/talsing (tenant/landowner) relationship is a remnant of the time before 1964 when complex caste and land-ownership dynamics allowed landowners to have dependent agrarian laborers who received varying portions of the crop, from basic sustenance wages to up to onehalf under a bataiya (in Terai-Madhesh) or adhiya (in the hills) arrange-

ment. The Land Act 1964 imposed a ceiling on land ownership, and secured tenancy rights. In 1997, the fourth amendment of the Land Act 1964 offered tenants ownership rights to fifty percent of the land which they had been cultivating - this provision is of interest while considering the complications encountered during rebuilding vis-a-vis landlessness among mohis.

land - and the landowner refused to give them any land to build on.

In Okhaldhunga, a local journalist told researchers that Dalits have not been able to rebuild because, "They are poor and cannot rebuild on their own. They have no access to government grants or banks." The chief administrator of a rural municipality in the district said, "Dalits ... don't have enough land to build new houses. Some Dalit household that received the second tranche of NRA grants didn't manage to build past the foundations of their houses." Since 2015, DRCN observed that Dalits have both fallen behind in their reconstruction, as well as gone into high debts after the earthquakes, especially in Okhaldhunga district, but elsewhere too.

In Sindhupalchok, the situation was similar. A social mobilizer in Chautara told researchers, "The pace of recovery is slow among the Dalit population of the ward. This is because they are illiterate and economically weak." A journalist in Chautara said

that while, on the one hand, people who had a second home in Kathmandu were reluctant to rebuild their rural homes, on the other hand, landlessness among Dalits and Tamangs hampered recovery of housing in the district. He said, "There is a settlement of displaced people in Banskhara, Jugal Rural Municipality, where twelve households are living in the community forest. They are mostly Tamangs and Dalits. The reasons behind this are poverty and landlessness." As discussed above, Dalits and other marginalized groups are also comparatively more likely to have entered exploitative lending arrangements with local moneylenders and microfinance institutions. While most were unsure about the longer term impacts of this on their lives and how to repay loans, some poor households already risked losing the house they had rebuilt in order to repay their debts. One Dalit respondent told researchers that the microfinance company he had borrowed from might auction his newly built house, "That's the only way to pay back my loans," he explained.

### Case Study 4.7: A Dalit man in Okhaldhung struggles under the burden of his debts

Mr. Tolangi, a Dalit man from Molung Rural Municipality in Okhaldhunga, struggled to rebuild and had to take large loans. Even though his house was too badly damaged to live in, he was only declared eligible for the retrofitting grant. He received the first installment of NPR 50,000 (USD 414), but since he was unable to repair his old house, which was too badly damaged in the earthquakes, he decided to build a new two-room house according to NRA building codes. However, he has been unable to complete rebuilding because he lacked the financial resources to pay for it.

To date, Tolangi spent around NPR 400,000 (USD 3,300) on the partial construction of his new house, mostly for materials and transportation costs. He, himself, worked as a construction laborer in order to save money. He had borrowed NPR 150,000 (USD 1,243) from local financial institutions and NPR 50,000 (USD 414) from moneylenders. He also received materials from hardware shops, which he has not yet paid for. Now, Tolangi works as a laborer (*jyami*) to pay back his debts, but his earnings are hardly enough to feed his family,

let alone pay back debts, interest, and cover the remaining costs to complete rebuilding.

Tolangi plans to send his only son abroad to earn money, but for this, too, he needs more cash to cover costs for visa, travel, and the labor agent. He said, "No one will give me more money if I ask because I have not paid back loans to the bank and moneylenders."

Tolangi has filed a grievance twice to have his house enlisted in the fully damaged category and receive the housing reconstruction grant of NPR 300,000. He said engineers visited his house and took photos several times. But he is still not sure if he can receive the full grant. According to Govinda, the ward chair and the engineers told him to build a new house. They also suggested him to build an earthquake-resistant house and file a grievance. They also sent his file to the NRA district office.

Tolangi now lives in fear that the bank and moneylenders will take away his small piece of land and house if he can not repay his debt.

### 4.2 Incomes and livelihoods

### **Key findings: Livelihoods**

With increases in borrowing and debt levels, and the impacts of the COVID-19 crisis in 2020, it remains important to observe whether and how people are able to generate sufficient and stable incomes from their livelihoods – and to provide continued support to those who are struggling.

Livelihoods have mostly recovered to preearthquake levels. While there have been many changes to livelihoods, few said they still struggled due to the direct impacts of the earthquakes on their livelihood. In particular, businesses that initially struggled after the earthquakes were found to have recovered, and in some instances, were doing even better than before. Indirectly, however, the earthquake continued to have impacts, as it increased people's need to earn larger amounts.

Reconstruction requires large amounts of cash, which rural subsistence farmers and other poor groups with low incomes do not have. These groups have long struggled to make a living and the impacts of the earthquakes made it even harder for many of them. For this

reason, livelihood support and income generating schemes remained a key need for earthquake-affected households. INGOs and NGOs provided some support, but not nearly enough to reach all of those in need. People who received masonry training after the earthquakes were also finding it increasingly difficult to earn incomes, as reconstruction rates slowed down.

Rural economies are changing and increasingly moving away from agriculture. As a result, roads, financial services, and cash incomes are becoming more important for rural households who face difficulties farming their land and storing agricultural produce and equipment in smaller houses. More people from farming communities are seeking foreign employment as an alternative livelihood option. This, combined with other impacts on livelihoods, due to decreasing land plots and farmland, climate change, and migration patterns or resettlement, may pose long-term challenges for livelihoods recovery and income stability in Nepal.

# The relationship between livelihoods and recovery from the financial impacts of the earthquake remains important.

It is important to also examine the impacts on livelihoods and incomes when discussing financial recovery and coping strategies of earthquake-affected households. Previous IRM reports found that livelihoods generally recovered quickly across areas visited, but also pointed to the fact that many poor households have long struggled to make a living and continue to do so in the aftermath of the earthquake. This is amidst rising debts and broader changes to

rural economies, which once were more subsistencebased, but are now becoming increasingly cash-based.

With increases in borrowing and debt levels, the slower progress of vulnerable and marginalized groups, and external impacts, such as climate change or the 2020 COVID-19 crisis, it remains important to continue monitoring whether people can earn stable incomes that help them recover from the financial impacts of the earthquake and the high costs of rebuilding. Continued livelihoods and income support to vulnerable and poor households remains crucial.



A man in front of his house, now used as tea shop, rebuilt from salvaged materials from his old damaged house, Gorkha 2019. Photo by Manasi Prasai

### 4.2.1 Livelihoods recovery

Livelihoods have mostly recovered to preearthquake levels, especially businesses.

In IRM-5 (late-2019), the livelihoods for the majority of earthquake-affected households across research districts had recovered. Businesses, in particular, had gone back to pre-earthquake levels of income, if not higher ones. In Bhaktapur Municipality and other urban areas, many families lived off businesses run from the ground floor of their family home, selling

products, like arts and crafts, jewelery, ayurvedic medicine, or groceries. Generally, those businesses recovered after an initial dip in the immediate aftermath of the earthquakes (Case Study 4.8).

Some businesses even reported improvements in income. Ms. Pariyar of Gorkha Bazaar, who had moved her shop closer to the town centre after her house was destroyed by the earthquakes, noted that, "Business is better now despite having to pay rent. Having a shop and workshop in the main bazaar has increased our number of customers." Her family

### Case Study 4.8: Tailoring business picks up again in Sindhupalchok

Gopilal runs a tailoring shop in Lisankhu, Sindhupalchok, from a room he rents for NPR 6,000 (USD 50) per month. Initially after the earthquakes, he had far fewer customers, but business picked up again, eventually returning to what it was before the earthquakes.

A month after the first earthquake, he closed his shop as business plummeted. His two-storey stone and mud-mortar house was totally destroyed, and he used the government grant to build a new two-room brick and cement-mortar house. He took a loan of NPR 300,000 (USD 2,500) for reconstruction purposes from a local cooperative at an 18 percent interest rate over 6 months, as well as 1.5 lakhs (USD 1,243) from a local moneylender at a three percent monthly interest rate. Slowly, business picked up again and he managed to return to pre-earthquake levels of income, which has allowed him to start repaying his debts.

now earns significantly more than they did while previously operating out of the family home (Case Study 2.4 in Chapter 2).

Others have opened businesses since the earthquakes. Previous IRM reports noted that more and more people tried to earn incomes through businesses, shifting away from agriculture. This continued to be true in IRM-5 (November 2019) (Chapter 4.2.2). Mr. Ghale was a migrant worker in Malaysia who used the debris of his old house in Barpak to build a temporary *momos* and *panipuri* (Nepali snacks) shop in his front yard. Although the earnings from his new shop do not compare with his earnings as a factory worker overseas, he is able to be with his family now, which makes it worthwhile for him.

Some businesses, however, still faced difficulties due to damage to their buildings. In the inner-city areas of Bhaktapur, as well as in bazaar towns in rural districts, the earthquakes destroyed many shops, often on the ground floors of family homes. Some families were able to rebuild their shops, but others had to rent new spaces or operate out of damaged buildings. Researchers found one example of a family of astrologers who had difficulty hosting appointments since their home was damaged in the earthquakes. Mr. Baidhya's ayurvedic shop was destroyed, along with his home. He now lives in rented accommodation while operating the shop out of the ruins of his old home. Mr. Napit, also from Bhaktapur, lost his barbershop when his home was destroyed. He also lives in rented accommodations now, while using a public paati (rest-house) to run his barbershop. Kalpana Simphal's family, in

Bhaktapur, built a new house, but they continue to live in their old damaged house because that is where their shop is located. This shows that many who operated shops before the earthquakes continued to be tied to their old locations, especially in Bhaktapur.

# Reconstruction requires cash, but rural subsistence farmers and other vulnerable groups are struggling to earn incomes.

While most people recovered their livelihoods, increased financial burdens imposed by reconstruction, as well as broader changes to rural economies (discussed in Chapter 4.2.2) meant that many rural subsistence farmers, those without land, and the urban poor struggled to make ends meet. The fact that income from subsistence farming was inadequate to finance reconstruction was already highlighted in previous IRM reports. The impacts of this can now be seen.

Earthquake impacts and reconstruction added financial burdens to those already struggling to earn stable incomes before the earthquakes. For this reason, many farmers living in rural areas have struggled to financially recover, or even feed their families, in the aftermath of the earthquakes. As they live mostly off their agricultural produce, they tend to have far less cash income than business owners or people in urban areas. In order to rebuild their houses, most took out loans from cooperatives, microfinance institutions, and money-lenders to supplement the government housing grant (Chapter 4.1). Many farmers said they cannot pay their loan back just by working in the fields. As such, an

#### Case Study 4.9: Rebuilding a home and livelihood after the earthquakes

Kanchhi Gurung's stone and mud mortar house was completely destroyed in the earthquakes. She rebuilt her home by salvaging material from the old house. Her new house is also stone and mud mortar, but the walls have been plastered with cement. She followed the NRA building codes and built a two-room structure, which she says will not be enough space in the long term, especially as her son grows up. The house has a truss and tin roof, but no attic, which means she no longer has enough storage space for the grain output from her fields.

The NPR 300,000 (USD 2,500) provided by the government was not enough to cover the costs of reconstruction. As her house is difficult to access, the cost of transportation for materials was high. She borrowed money from a local cooperative, placing gold, and her land deeds as collateral. The Japanese International Cooperation Agency (JICA) provided her with two goats after the earthquake to help her earn a living. She now has twelve goats, but finds it difficult to find buyers in Barpak. She earns cash by sieving sand on the Rangrung river.

increasing number of young people from rural areas are without work and looking for alternatives (see below).

Agrarian communities, particularly in Sindhupalchok and Okhaldhunga, struggled to recover economically, were unable to pay back debts, and had very little employment opportunities and no substantial government schemes to support them in their recovery. Sarita BK from Molung, Okhaldhunga, laments, "I want to work to repay my debts, but who will give us work? The road arrived recently, but it has not helped me get employment." In Bhaktapur, some people who owned their own houses were forced to live in rented accommodations while their homes were being rebuilt. As the reconstruction process was comparatively slow, rent became an added financial burden, particularly for single and older people who had less of a family network to support them.

Livelihoods support and income generating schemes remained a key need for earthquakeaffected households. I/NGOs provided some livelihoods assistance and opportunities for income. Several NGOs, especially in Sindhupalchok, provided improved seeds, livestock assistance, health and sanitation awareness, and masonry training to survivors. Such assistance, however, was not widespread in terms of areas covered, and households reached, in the places visited for IRM research. There were also cases of unsuccessful income-generating schemes, such as in Barpak, Gorkha, where pigs were provided as assistance – but the Ghaleys and Gurungs of Barpak do not consume pork.

Given changes to rural economies (see below), to livelihoods, and the increased need for cash generated by reconstruction, the urgent need for livelihoods support remains. Findings from IRM-4 (April 2017) indicated that a majority of wards visited listed livelihood-related support as an important need. In IRM-5 (November 2019), most people wanted cash or interest-free loans. Livelihoods support was cited less frequently, but many said they struggled to earn incomes and did not know what to do, other than looking for foreign



- 1. A Dalit boy whose parents committed suicide in 2016. Photo by Prabhat R Jha
- 2. Elderly woman in Sindhupalchok, 2019. Photo by Prabhat R Jha
- 3. A woman grinding turmeric outside her shelter. Sindhupakchok, 2016. Photo by Prabhat R Jha
- 4. An elderly woman spinning yarn in Bhaktapur, 2019. Photo by Prabhat R Jha

### Case Study 4.10: A mason struggles to find work as the rate of construction slows down

RB Sarki worked as a laborer in Qatar when the earthquakes destroyed his house in Sunkoshi, Okhaldhunga. He was not added to the beneficiaries' list and has therefore not received any government aid to rebuild. Since the house was on the verge of collapsing, he pulled it down himself and built a tin sheet shelter in its place. He completed a 50-day

mason training organized by the INGO, Helvetas, after which he built nine houses. During the peak of construction, he was paid NPR 1,000 (USD 8) per day, which then fell to NPR 700 (USD 6) as demand decreased. He is now struggling to find work at all, since the pace of construction has slowed with more houses being completed.

employment (see below), which indicated the demand for income-generating schemes. In several areas, researchers also learned of the need for more support with water, irrigation, and sanitation, since several water springs had dried up or shifted in the aftermath of the earthquakes.

#### Those who received masonry training after the earthquakes struggled to find employment, as reconstruction rates slowed.

In the first three years following the earthquakes, demand for masons was high, as communities started rebuilding their homes, and rates had also increased. Most trained masons were paid up to NPR 1,500 (USD 12), plus three meals per day, to work on the reconstruction of a house. As many people have now finished rebuilding, demand for masons has decreased and daily income has dropped in some places to as low as NPR 500 (USD 4), if work is even available (Case Study 4.10).

### 4.2.2 Changes to livelihoods

### Smaller houses and the increased need for cash are changing the face of rural agriculture.

Housing recovery after the earthquakes had a significant impact on agriculture, through loss of space for rearing livestock and storing agricultural produce, and the consequent move away from subsistence farming to cash crops. In Nareshwor, Gorkha, farmers moved away from keeping draught animals toward mechanized farming, and away from rearing milk-cattle (which supplied milk for the household and fertilizer for fields) towards rearing goats and chickens (which fetch cash for consumer goods). Livelihood support programs by I/NGOs and local financial institutions often focus on cashgenerating farming, like rearing goats and chicken for the market (Case Study 4.7).





- 1. A small tea shop in the front yard of a private house for income generation in Barpak, Gorkha, Photo by Manasi Prasai
- 2. Leather goods on display at a Dalit-owned workshop in a damaged house in old Gorkha Bazar, 2019. Photo by Manasi Prasai

According to a local politician from Manbu in Gorkha, recovery and livelihoods were affected by new socio-economic realities. Out-migration for employment from rural areas into bazaar areas, or abroad, has increased, leading to a decrease in agricultural productivity. More and more land is being left fallow, and there are fewer cattle in the villages – meaning fewer draught animals for farm work, and reduced sources of milk and fertilizer.

Due to the cash injection after the earthquakes, inflow of remittances from abroad, and increasing needs for cash for reconstruction and migration, the rural economy is changing and increasingly moving away from farming. More people are seeking salaried employment and cash incomes, rather than engaging in subsistence or small-scale farming, as was commonly the case before the earthquakes. The impacts of these trends were observed in all districts visited. Those who can, are starting businesses or getting salaried jobs, while poor subsistence farmers and uneducated marginalized groups continue to rely entirely on agriculture as well as loans - to be paid back with foreign employment - in order to pay for reconstruction and cover their daily needs. Researchers also found that large parts of the remittances being sent in by migrant workers was diverted towards paying back interest and loans taken out to finance rebuilding.

Due to changes in rural economies, roads and financial services are increasingly important for rural livelihoods. As rural areas turn away from subsistence farming towards a market-based economy, roads have become increasingly significant. Roads assisted with recovery, not only by supporting the construction process, but also by becoming new conduits for commercial goods to and from rural settlements. Accompanying this development, is the proliferation of financial services, either in the form of new branches of commercial banks at the ward-level, or numerous microfinance and savings cooperatives being formed and operated, especially among rural women (Chapter 4.1.2). This, too, indicates people's increased need for cash, to be used for reconstruction and for other purposes.

#### More people from farming communities are seeking foreign employment as an alternative livelihood option.

As mentioned in Chapter 4.1.4, more and more earthquake-affected households are looking toward foreign employment - whether as labor or in security forces - to earn cash and pay back debts. Young people, in particular, lacking other options and unwilling to engage in agriculture, were keen to go abroad to find work. Mr. Tamang from Kakani, Okhaldhunga, told researchers that all the youths of Kakani have gone abroad, leaving only four or five young people remaining in the village. "Young people are compelled to go abroad so we can pay back our loans," explained Raju Tamang. Researchers met with several farmers in all districts, including in Bhaktapur, who were contemplating going abroad for employment in order to make ends meet and repay loans (Case Studies 4.7 and 4.11).

### Case Study 4.11: Compelled to seek work in India to repay debts

NB Ramtel, from Katunje in Okhaldhunga, was working as a laborer in India when the earthquake destroyed his house back home. Although damaged beyond repair, he says, it was only listed as partially damaged and eligible for retrofitting support instead of the full housing reconstruction grant. He received the first installment of the housing grant, with verbal assurance from local

representatives that he would receive the full housing grant to rebuild his home. With this in mind, he borrowed money to rebuild his house fully, in compliance with NRA building codes. However, he never received further tranches. "So," he says, "I have no choice but to go back to India to find work and repay my debts."



Shop built reusing stones with wood banding in Barpak, Gorkha, 2019. Photo by Manasi Prasai



Photo: Prabhat R Jha

This report looks at some of the longer-term impacts of the earthquakes, as well as recovery patterns observed in late-2019, to identify remaining challenges and needs. The focus is on housing recovery and the experiences and perceptions of earthquake-affected households and local reconstruction stakeholders in municipalities visited. The perspectives of non-governmental aid providers and central-level actors are not included. This research demonstrates the value of social impact 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 earth-quake recovery and disaster risk reduction and preparedness in Nepal.

These conclusions summarize key findings and identify remaining challenges and opportunities for ongoing earthquake recovery, as well as future disaster responses – with a particular focus on the governance of disaster responses.

### 5.1 Housing reconstruction

Most people have **completed rebuilding within the housing grant scheme**. Over time, access to, and information on, the housing grant has significantly improved, with local governments and engineers emerging as key sources of information in 2019. The grievance process has also become easier, leading to the later inclusion of some individuals who had been wrongly omitted from the housing grant beneficiary lists. As housing grants are distributed through dummy bank accounts, access to banks has become more widespread. Satisfaction with the housing scheme, and the safety of new earthquake-resistant houses, was generally high, and people showed increased

awareness about building codes and safer building techniques.

Yet, the majority of beneficiaries built **new two- room houses** that are smaller than their previous houses and insufficient to accommodate their needs, often due to misconceptions about how they could build within the housing grant scheme, and a lack of financial resources to build bigger. The new houses are mostly concrete and brick structures, which changed the looks of traditional settlements and led to the loss of heritage buildings and culture. Many of those who built small houses plan to expand their

houses in the future. Due to limited awareness of retrofitting, some have rebuilt instead of repairing/retrofitting older houses, despite having had only partial damages.

Partially damaged houses continue to be widely used by those who have rebuilt and by those who have not yet rebuilt, especially in urban areas. While many have done their own repairs on partially damaged houses, only very small numbers have done retrofitting. Information on retrofitting assistance and techniques remained limited and inadequate, and the difference between "repair" and "retrofit" was still unclear to most. Communities and local governments opposed enforcing the demolition of partially damaged houses due to the widespread need for the space these provide.

Urban reconstruction still faces multiple challenges and has been slower than rural reconstruction. The reasons for this are complex and vary according to the type of urban settlement and individual factors, but the main reasons are higher demolition and construction costs, smaller land plots, and family disputes over how to jointly rebuild. The urban poor have been the worst affected and many continue to live in vulnerable conditions, such as in badly damaged houses or temporary shelters. Despite challenges specific to urban areas, little had been done by late-2019 to address these at the local level and support urban housing recovery more holistically.

Access to technical assistance also improved over time through the increased presence of engineers in municipality and ward offices. Yet, some earlier challenges persisted. Appointed engineers changed frequently, access was more difficult in very remote areas, and the assistance provided was often solely focused on processing housing grants and considered to be inadequate, especially on retrofitting, which was not well understood by engineers or eligible households.

Data collection and management was streamlined and improved over time, but engineers and other stakeholders continued to face challenges related to limited access to technical equipment, delayed or incomplete handover of written records, and limited local-level verification of local data collected by engineers and technical staff to forward to central NRA offices. This contributed to delays in resolving grievances and to data errors or gaps, although there were some improvements in local oversight following the arrival of local governments.

### Opportunities, challenges, and remaining needs

The increased presence of technical staff at municipality and ward offices provides opportunities for future construction in affected areas and possibly beyond. With greater awareness of housing safety and consistent monitoring of building code implementation, housing safety in Nepal may greatly improve.

Retrofitting uptake has been limited, but may provide an opportunity for those still using partially damaged houses, especially if access to retrofitting can be improved and support can be provided more widely, especially if expert-led, rather than home owner-led, given the complexities and misunderstanding of retrofitting at the local level.

The above opportunities should be considered to address key remaining needs for housing reconstruction and the longterm safety of houses, which include:

- 1) The need for *retrofitting* remains widespread, as many partially damaged and older, undamaged houses remain in use, and uptake of retrofitting support has been very low. Information on, and support for, retrofitting needs to be improved and communicated more clearly to communities as well as technicians. The retrofitting grant alone may not constitute sufficient support and incentive to increase retrofitting uptake, and therefore, additional support may need to go beyond the schemes, involving more experts rather than being owner-led.
- 2) Those wanting to expand their houses in the future would benefit from guidance on how to do so safely, as well as strict enforcement of building codes beyond the reconstruction period.
- 3) *Urban areas* need additional support. Urban reconstruction likely requires multiple types of support, including: 1) holistic approaches to support urban reconstruction that involve municipalities and other actors to develop comprehensive urban regeneration schemes; 2) individual support to vulnerable households in urban areas that remain in unsafe housing and lack finance or land to rebuild; and 3) heritage and restoration schemes to support the repair

of older earthquake-damaged houses that have cultural or historical value.

- 4) Technical assistance remains crucial and should be provided in all affected areas without major interruptions. Technical assistance for retrofitting needs to be improved (see above).
- 5) **Data management** can be further improved through technical support and better local level verification. This may also ensure that the most vulnerable, or those still unable to rebuild, are counted or tracked within the system, and are thus, more likely to receive services. Data collected through the housing grant program and the bank accounts established to disburse the grants provide opportunities for future cash grant schemes. Lessons learned during this process should be well documented by those involved.

# Considerations for future responses

- rebuilding and retrofitting options should be determined early and communicated clearly to allow people to rebuild or repair according to their needs and preferences. Housing models should take traditional building techniques and designs into consideration to preserve heritage. The repair and retrofit of houses with partial damages should form part of the strategy from the beginning to avoid unnecessary demolishing of houses and to reduce costs.
- 2) *Information-sharing* is as crucial as the assistance provided. Communication channels

- should be clear, and information shared timely. Communication with communities will be most effective through local governments, radio, deployed technical staff, and other key stakeholders at the local level. Information through pamphlets and other written formats is less effective.
- 3) **Retrofitting** is complex and requires adequate knowledge of how to retrofit various building types. Engineers and other technical staff implementing retrofitting must be adequately prepared through extensive, in-person trainings, and retrofitting should be included in engineering curricula.
- 4) Extra support for the building of *heritage houses* can support the preservation of heritage and therefore, should be considered in future responses, in both urban and rural areas.
- 5) *Urban reconstruction* requires broader schemes for urban regeneration and the preservation of heritage, beyond owner-driven reconstruction. While urban poor need extra support, just like other vulnerable groups, urban reconstruction as a whole requires specific policies, inputs, and schemes that take a comprehensive, holistic approach to urban reconstruction. Such support should be considered from as early as possible to prevent urban reconstruction from falling behind.
- 6) **Data management systems** should be established quickly, with sufficient training and logistical support for all involved, to avoid data errors. Future disaster responses should take data capacity, needs, and existing systems into consideration to support emergency responses.

### 5.2 Access to finance

Inclusion in the housing grant scheme and access to the financial support it provides for reconstruction has been good. The majority of beneficiaries were able to access their housing grants, which were distributed directly to beneficiaries via bank accounts, without interference or major disruptions. As such, large numbers of earthquake-affected households have successfully been provided financial support towards housing recovery.

However, some have been wrongfully *excluded from the housing grants, despite great needs* for support, often due to earlier mistakes or technical glitches in initial damage assessments and the grant enrollment process, which were not corrected through the grievance process. Others were denied access due to missing documentation, such as land certificates or citizenship certification. Many affected households, as well as local governments, did not

understand why they still remained excluded nearly five years later. There were only a few isolated complaints about the "inflation of beneficiary lists" and wrongful inclusion.

Given high rebuilding costs, overall *grant* amounts were considered insufficient to help people financially recover from the impacts of the earthquakes. Many complained about the division of grants into multiple installments, each insufficient to cover expenses necessary to qualify for the next installment. The average costs of rebuilding far exceeded the amount of the housing reconstruction grant. In urban areas, costs were particularly high due to the type of houses built, higher costs of building in heritage areas, and high demolition costs. People in remote areas paid a significant share of their overall rebuilding costs on transportation of reconstruction materials.

As costs of rebuilding were generally higher than the housing reconstruction grant, most people required access to additional finances to rebuild. Yet, *government low-interest schemes* for earth-quake-affected households that needed to rebuild largely failed and reached only a very small number of people. Most borrowed from other sources, often at high interest rates.

Borrowing for reconstruction increased over time, both in amounts and frequency. In rural areas, borrowing was more common, but people borrowed comparatively smaller, though still significant, amounts at high interest rates from local cooperatives, moneylenders, and microfinance institutions. In urban areas, fewer people took out loans, but the loans were larger and usually taken from formal sources of lending at lower interest rates. People in rural areas struggled more to repay debts. Micro**finance institutions**, an increasingly prominent source of lending, mostly targeted rural women, but relied on exploitative practices to create revenue. Many complained about the coercive rules and high interest rates of microfinance groups and some had to take multiple loans to pay interest for one microfinance group with a loan from another. Coopera*tives*, on the other hand, were sometimes providing "home loans" at lower interest rates, trying to help members rebuild and recover. Very few people borrowed from banks for reconstruction purposes, but borrowing from money lenders and other informal sources remained common due to the flexibility they provide.

Many earthquake-affected households were stuck in cycles of *debt* and borrowing, especially those from poor and marginalized Dalit and indigenous communities. Most were unsure how to repay loans and said they would have to rely on employment overseas. The sale of land as a coping strategy became more common, especially in urban areas and bazaar towns. Many people still hoped to receive subsidized loans from the government to help them repay loans. Communities and local government agreed that access to additional finance, via low-interest loans, would be best suited to help them financially recover.

Livelihood support and income-generating schemes were considered important for earth-quake-affected households despite the fact that pre-earthquake livelihoods had mostly recovered. Reconstruction requires large amounts of cash, which rural subsistence farmers and other poor groups with low incomes do not have. These groups have long struggled to make a living and the impacts of the earthquake made it even harder for many of them. Many benefitted from mason trainings, but increasingly found themselves without work due to decreasing reconstruction activities.

# Opportunities, challenges and remaining needs

The success of the housing grant scheme in providing direct financial support and ensuring building safety, points to the benefits of and opportunities for cash grant schemes. Yet, challenges ensuring all those qualifying for cash grants actually received them, and in providing additional financial support to those struggling to cover full rebuilding costs, led to increased borrowing and debt. Below are the remaining needs:

- Those mistakenly excluded from the housing grants, or unable to access them, require continued attention through the grievance process and possibly through additional policies to ensure no one fell through the cracks.
- Attention needs to be paid to *rising debts* and those struck in debt traps. Despite progress in reconstruction, the need for subsidized low-interest loans remains, as many have high debts as a result of rebuilding.

- With increases in borrowing and debt levels and the *impacts of the COVID-19 crisis* in 2020, it is important to continue tracking whether and how people are able to generate sufficient and stable incomes from their livelihoods – and to provide continued support to those who struggling.
- **Livelihoods support** is still needed by many struggling to earn enough income to finance reconstruction or to repay debts. However, such support must consider changing contexts. Rural economies are increasingly shifting from agriculture, such that roads, financial services, and cash incomes are becoming more important for rural households who face difficulties farming their land. Increasing numbers of people from farming communities are seeking other forms of employment, including foreign employment, as alternative livelihood options. This combined with other impacts on livelihoods due to decreasing land plots and farmland, climate change, and migration patterns or resettlement, may pose long-term challenges for livelihoods recovery and income stability in Nepal.

# **Considerations for future responses**

 Procedures, standards, and logistics for damage assessments (and data management) must be clarified by and for all those

- involved before the process begins taking into consideration lessons learned from post-earthquake assessments, to ensure accuracy and to avoid mistakes that exclude deserving households from receiving timely support.
- Future responses may need to **regulate financial sectors and provide low-interest recovery loans** to prevent borrowing at high-interest rates and debt traps. Subsidized low-interest loans must be provided widely, facilitating access for poorer groups who are most in need of such loans. Beyond the roles of banks, finance schemes and loans policies should consider the positive roles cooperatives played, and should regulate institutions with exploitative loan practices, such as microfinance groups.
- Financial support should be broadened to include forms of support beyond cash grants and loan schemes, such as livelihoods support or regulation of, and cooperation with, the construction sector to stabilize prices of materials and labor.
- Livelihood support and income generating schemes will be crucial in future responses and should be provided widely alongside financial assistance for reconstruction to address debt levels and support financial recovery.

### 5.3 Vulnerabilities and needs

Most *vulnerable households received little additional support* for reconstruction in the first five years after the earthquakes. Those fallen behind seem to be stuck, despite efforts to address their needs. Even with policies to address specific needs of vulnerable, landless, and displaced households, these groups remain slower to rebuild and fell behind in their recovery.

This research identified the following types of vulnerabilities caused or exacerbated by the earthquake and subsequent response.

Poor vulnerable households who did not receive the housing grants:

• Land issues were one of the main reasons why people were unable to access support and rebuild, even five years after the earthquakes. Many of those who lacked land documents were elder single women, Dalits, and tenant farmers. These groups were among those most likely to remain in temporary shelters five years after the earthquakes. While special provisions were made to address landlessness, several landless

groups found themselves unable to access this support due to informal land arrangements or family disputes.

• Those excluded from beneficiary lists due to mistakes in initial damage assessments which were not corrected through the grievance process were often unable to rebuild due to lack of housing finance (see Section 5.2 above) and their inability to mobilize other financial resources.

Those facing additional vulnerabilities introduced by the earthquakes and reconstruction which were not (yet) met:

- Displaced groups faced greater obstacles in reconstruction due to difficulties relocating to land elsewhere. While policies allowed additional financial support and special provisions to facilitate resettlement, many displaced households remained on unsafe land or in precarious situations. Resettlement had not yet been resolved for many for whom the assistance provided was insufficient or unsatisfactory, or for those who preferred staying on their original land, despite safety concerns. Others successfully relocated with external support but struggled to make a living or faced difficulties accessing their fields or infrastructure, such as roads and schools, which introduced new vulnerabilities.
- **The urban poor** generally faced greater difficulties in reconstruction than rural households due to higher demolishing and rebuilding costs in urban areas and smaller land plots, which prevented them from building safe shelters. Therefore, many remained in unsafe, damaged houses or had to rent accommodation, preventing them from putting money aside for rebuilding.
- Many *low-income households* faced new challenges due to the *increased needs for cash to pay for reconstruction*, which they found hard to meet. While the urban poor generally remained in unsafe housing, the rural poor, many subsistence farmers, turned to borrowing at high interest rates to rebuild. Due to the lack of access to government-subsidized low-interest loans and limited livelihood

options, large numbers of low-income families struggled to pay off *high debts* incurred by reconstruction. Exacerbated poverty and new vulnerabilities due to debt traps will likely become more apparent over time.

# Opportunities, challenges and remaining needs

Existing provisions to support vulnerable, landless, and displaced households make it possible to continue extending additional support to more households who most need it. However, current NRA definitions of vulnerable groups do not include all those facing additional or exacerbated vulnerability after the earthquakes. Some genuine earthquake victims remain excluded from rebuilding support, even five years later, and are unable to rebuild without going into high debts. For others, especially the displaced, support provided was insufficient due to special needs and increased costs incurred by resettlement or other factors.

These challenges must be considered, and more efforts made to address the remaining needs of vulnerable households still struggling to recover many years later. The remaining needs of vulnerable households include:

- 1) Those falling behind in housing recovery remain in great *need of additional financial support*, either by facilitating access to grants or by providing extra assistance outside or beyond the grant schemes. Housing vulnerability was primarily related to poverty and limited access to finance, as well as various forms of landlessness, all of which prevented marginalized households from rebuilding. Vulnerability top-up grants are likely insufficient and will not reach many of those in great need.
- 2) Poor and marginalized low-income families have long faced multiple challenges in Nepal, many of which have been exacerbated by the earthquake and its impacts. Support for vulnerable households should take this into consideration and aim to support livelihoods and provide sustainable income opportunities to households struggling to make a living under the burden of debts incurred by reconstruction.

# Considerations for future responses

- 1) Vulnerable households, especially the very poor and landless, will not be able to recover without special assistance and require additional support to prevent them from either going into high debt or falling behind in rebuilding. In the future, this support should be provided before vulnerable groups fall behind, to avoid increasing vulnerabilities of already marginalized households.
- 2) **Definitions of who is vulnerable** must be carefully considered and criteria developed to assess vulnerability alongside damages, ideally with the involvement of local stakeholders who may have a better sense of who is falling behind and for what reasons.
- 3) Multiple rounds of assessments may be required to identify and reach all those affected by future disasters. For improved targeting and inclusion of the most vulnerable, consider iterative targeting with initial assessments and periodic reassessments to capture those who were missed in earlier rounds, or who become more vulnerable over time as a result of the disaster.

### 5.4 Governance and local government

The *governance of this reconstruction process* was centralized, with the NRA directing and managing reconstruction, with only limited involvement of local-level actors. Over time, some powers were devolved to new local governments in affected areas, but important decision-making and implementing powers remained with the NRA. Thus, local actors at district and municipality levels considered their roles limited and subordinate, with only facilitating roles rather than implementing and decision-making ones. The involvement of local political leaders and civil society actors in the reconstruction process was minimal in 2019.

Yet, local governments assisted with the implementation of government schemes and contributed to improved access to the housing grants, technical assistance, and the grievance process. They helped people file grievances; supported verification of complaints; facilitated access to engineers; managed and forwarded data; and shared information on central-level decisions, new policies, and changes to procedures. Their roles had not changed since they became involved in reconstruction in late 2018 and early 2019. Local government showed limited initiative to devise disaster response plans specific to their areas and to earthquake experiences. Their disaster preparedness efforts focused on budgets for disaster funds and the purchase of equipment, such as tents, ambulances, or fire engines.

Over time, *coordination* between central and local levels improved due to clearer division of responsibilities, better clarity on policies, and improved housing grant procedures. Yet, *communication gaps* persisted. Local governments thought that coordination between local and central levels remained one-sided and slow, making it difficult for them to do their work effectively. They expressed that changes to NRA policies were not communicated to them in a timely and clear manner, and that they were not adequately consulted in the process.

# Opportunities, challenges and remaining needs

The arrival of local governments provided great opportunities for decentralizing and improving the reconstruction process. Yet, with limited roles given to local governments, their limited capacity and resources to work on disaster responses, and communication gaps between central and local levels, a number of reconstruction governance challenges remain.

 Local governments and other local actors need timely and clear information on changes to procedures and policies. Their ongoing consultation on required changes may improve communication and understanding between central and local levels. Local governments have the most direct access to citizens in need of reconstruction support. As such, they were instrumental in elevating needs of their constituents through improved access to the housing grants, technical assistance, and the grievance processes. With proper systems, local governments can quickly and efficiently direct resources to affected households. Therefore, the roles of local governments in ongoing assistance schemes can be increased. For example, they can roll out top-up grants for vulnerable groups and find reset-tlement solutions.

# Considerations for future responses

 The involvement of local governments as key actors, with strong two-way communication channels between central and local levels, could have strengthened the reconstruction process and paved the way for future disaster response mechanisms in a decentralized governance system. Currently, local governments have limited awareness of *disaster preparedness* and response, and limited capacity and resources to adequately prepare. Local governments need continued support in this area, and the opportunity to share their perspectives, to help them adequately prepare for and respond to future disasters.

2) Local government disaster preparedness should include *mechanisms and approaches for accountability and assessment*—both for immediate household resource needs, and to better plan for future needs. For example, it can include systems for ongoing data registry and management that will provide the information for targeting disaster response, should the need arise.















