Habitat for Humanity® Nepal

4 LESSONS FROM THE 2015 NEPAL EARTHQUAKE HOUSING RECOVERY

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Front cover photograph
Volunteer Upinder Maharsin (red shirt) helps to safely remove rubble in Harisiddhi village in the Lalitpur district. Usable bricks and wood were salvaged for reconstruction later, May 2015.

Back cover photograph
Sankhu senior resident in front of his house, formerly three stories, reduced by the earthquake to one-story, with temporary CGI roof. November 2019.

FOREWORD

Working in a disaster-prone region brings challenges and opportunities. Five years after Nepal was hit by devastating earthquakes in April 2015, tens of thousands of families are still struggling to rebuild their homes. Buildings of historical and cultural significance that bore the brunt of the disaster could not be restored.

While challenges abound, opportunities have also opened up, enabling organizations such as Habitat for Humanity to help affected families to build back safer and better. Having worked in Nepal for over two decades, Habitat for Humanity continues to partner with families particularly as they drive their own home reconstruction process. With the commitment and support of the Government of Nepal and its development partners, we have seen progress in post-disaster recovery.

We wish to tap into the insights of Nepal's work in post-disaster housing recovery given the scale and complexity. With this report, we present four important emerging lessons that offer insights and guidance for future disaster responses for governments and various stakeholders. Key questions are also raised to help frame further discussions.

Around the world, 1.6 billion people are living without adequate shelter and many of them are right here in Nepal. The housing crisis is getting worse due to the global pandemic's health and economic fallouts. Because of Habitat's vision, we must increase our efforts to build a more secure future through housing. We look forward to joining with other partners in building homes, communities and hope.

Christy Stickney
National Director, Habitat for Humanity Nepal

Housing reconstruction after the earthquake Salme, Ghalegaun. © Habitat for Humanity Nepal.

ACRONYMS

CBO	Community Based Organization
HRRP	Housing Recovery and Reconstruction Platform
IFRC	International Federation of Red Cross and Red Crescent Societies
(I)NGO	(International) Non Government Organization
IOM	International Organisation of Migration
NRA	National Reconstruction Authority
NSET	National Society for Earthquake Technology -Nepal
PDNA	Post Disaster Needs Assessment
PDRF	Post Disaster Recovery Framework
TWG	Technical Working Group
UN	United Nations

TERMINOLOGY

Recovery: '*The restoring or improving of livelihoods and health, as well as economic, physical, social, cultural and environmental assets, systems and activities, of a disaster-affected community or society, aligning with the principles of sustainable development and "build back better", to avoid or reduce future disaster risk.*'[1] UNDRR (2017)

In this document[2]:

'shelter' refers to temporary accommodation arrangements (including tents, temporary structures, rented or hosted accommodation),

'housing recovery' refers to reconstruction, repair or upgrading of permanent durable accommodation or dwellings affected by a disaster, as well as the restoring or improving of the means of housing production, including regulatory systems, access to building materials, labor and finance.

'financial assistance' refers to material or financial resources provided to disaster affected households and communities to support their housing recovery including shelter, housing repair and reconstruction. Financial assistance is a transfer or grant from a donor to a recipient household or community and may take various forms including cash, tax relief, materials or full houses. Insurance is a financial service based on a mutualised system, but in the case of disasters, insurance payments may embody characteristics of financial assistance or transfers from the perspective of the receiving household.

'technical assistance' refers to measures which use knowledge, practice or agreement, in particular through policies and laws, public awareness raising, training and education, quality assurance, monitoring and evaluation. The term 'socio-technical assistance' is used by some organizations to emphasize the importance of people as well as technology in assistance activities. Some categories of activities are described in other publications as 'institutional support', 'community facilitation', 'capacity building', 'advisory services' or 'quality assurance', usually reflecting the mandates of the assisting agencies. For the purpose of simplification, in this document, the term 'technical assistance' is used as an umbrella term for all non-financial/ material assistance incorporating all expertise and all activities. Technical assistance is not limited to engineering expertise, but encompasses social, communication, information management, business development, legal, administrative and other expertise and assistance activities.

'housing system' refers to the actors and institutions, including their relationships and interactions, that are involved in the production, consumption (or use) and regulation of housing. The housing system is part of a wider societal system; thus its different parts are influenced by broader external factors such as economic, sociocultural, political and demographic trends. Housing system outcomes, in turn, have an impact on the broader societal system.

1 UNDRR (2017) "2009 UNISDR Terminology on Disaster Risk Reduction".https://www.undrr.org/terminology/recovery

2 See also: UN Habitat and AXA (2019) Supporting Safer Housing Reconstruction After Disasters. Planning and Implementing Technical Assistance at Large Scale. http://urbanresiliencehub.org/housingreconstruction/

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Reconstruction on small plot, storage of materials and preparation works on the main street Patan, February 2020.

INTRODUCTION

Catastrophic and high-profile disasters present opportunities for learning and change. They test the systems of humanitarian and reconstruction assistance and can indicate possible improvements as well as build pressure or momentum to bring those improvements about. Learning from deficiencies after the 2004 Indian Ocean tsunami led to improved coordination in subsequent responses. Successful experience from housing reconstruction after earthquakes in India (2001) and Pakistan (2005) contributed to the increased the use of cash grant programs and promotion of risk reduction during recovery.

After five years since the 2015 earthquake, extensive experience has been gained in Nepal. This provides the potential to inform continuing development and future disaster response in Nepal, to inform other governments and communities facing the challenges of disaster recovery and to inform the policies and practices of humanitarian assistance.

This report presents four potential areas of learning, framed as four lessons, identified from experience and discussions in Nepal. They are limited to housing and settlement recovery and organized under four broad themes:

1) **Housing Finance**
2) **Urban**
3) **Institutionalization**
4) **Technical Assistance**

The focus is primarily on learning from the Nepal earthquake recovery for humanitarian and reconstruction assistance stakeholders, describing systemic challenges and shortcomings in order to advocate for systemic change and improvements. The lessons are aimed primarily at the assistance community or development partners nongovernmental organizations, INGOs, U.N. agencies, development banks, bilateral agencies, donors) who have a responsibility to learn, improve their own policies and practices and take steps to avoid repeating miscalculations.

The report is intended as an initial contribution to discussions with Government, development partners, civil society and affected communities as part of the evolving initiatives to document, learn from and communicate about the Nepal housing recovery experience. More data, research and debate are needed on each topic to advance the analysis and recommendations.

SUMMARY

1 Housing Finance

Cash grants alone are insufficient as a housing recovery financial strategy. Additional measures are needed to address affordability.

How to afford the timely reconstruction of private housing is a recurring challenge after disasters, for the affected households and communities and for the Government. In Nepal almost 2 billion USD has already been channeled directly, through cash grants, to over 800,000 earthquake-affected households since 2015 to support their housing recovery after the earthquake, but needs, associated with housing, remain.

It is important to acknowledge significant achievements in the Nepal Government cash grant program and to learn from the implementation. Learning from the Nepal case may also highlight the limitations of cash grants alone to address the financing of housing recovery and echo findings from cash grant experiences in other disaster cases. The emphasis in housing recovery policies by the Nepal Government and development partners and in public debate is on the amount of financial assistance provided in cash grants. There is far less emphasis on reducing costs of housing reconstruction, or other measures to address affordability.

For future housing recovery stakeholders, in Nepal and elsewhere, the 2015 earthquake experience indicates that timely and affordable housing recovery requires diversified strategies to reduce construction costs and ways to develop housing financial services and access to credit on reasonable terms to increase the ability of households to meet those costs.

2 Urban

Urban recovery was neglected, again. How might urban authorities and communities be better supported?

The 2015 Nepal earthquake is perceived as a rural disaster although the 100,000 houses destroyed in urban areas is comparable to the number destroyed in urban earthquakes in Kobe, Japan (1995) and Haiti (2010). Urban recovery in Nepal has been more problematic than rural recovery and requires specific technical and financial assistance, particularly in historic towns.

After Haiti earthquake, the global humanitarian community acknowledged they were unprepared to respond to urban crises and took several steps to develop urban policies and capacities. Following the Nepal earthquake, they will have to account for why policy commitments are not translating sufficiently into practical actions; why urban areas are neglected.

Since capacity continues to be a critical constraint, strategies to harness local skills should be a priority. Supporting urban recovery is not only the responsibility or purview of government and humanitarian organizations. Urban expertise in land use planning, infrastructure, cultural heritage and communication from professional bodies, commercial and civil society organizations can play vital roles to inform and enable recovery.

Experience from other disasters indicates that urban housing reconstruction typically takes over a decade. Urban recovery in Nepal needs to be framed as part of urban development and urban regeneration with a wider range of stakeholders involved and longer time frames. The year 2020 could be the start of a new phase, with renewed participation by humanitarian and civil stakeholders to support authorities and communities.

3 Institutionalization

Institutionalization is about people as well as policies. Capacity is a recovery dividend.

Efforts to transfer policies, data or expertise and data from disaster recovery programs to long-term authorities have proven difficult in several countries after disasters. Similar challenges may be expected in Nepal. Institutionalization appears to be a shared objective and therefore feasible to achieve. In reality, learning and institutional change are extremely difficult to bring about.

In what may now be the completion phase of the National Reconstruction Authority (NRA), the Government of Nepal has to plan for future governance of the built environment and disaster risk management. When recovery support systems are no longer in place, the memory of disaster losses recedes and risk reduction must compete with other priorities.

The earthquake affected over 6 million Nepalis' lives. Thousands have been involved in managing and implementing recovery over several years, all of whom have developed new knowledge, skills and experience that can contribute to the resilience of the country.

Institutionalization might best be conceived as a process to facilitate multiple stakeholders, in government, business, academia and communities, to develop strategies to capture and share their learning and for continued use of that learning. Breaking down what seems like an overwhelming aspiration into specific interest groups, defined activities and commitments, and timelines that can start now, may make institutionalization practical and achievable as a shared responsibility and a joint undertaking.

4 Technical Assistance

Technical assistance needs joined up planning not just a collection of projects.

The need for technical assistance (or socio-technical assistance) strategies for housing was identified shortly after the earthquake. Technical assistance was considered critical to meet 'build back better' objectives and development partners were requested to provide support particularly at community level. The humanitarian principle of protection includes the right to information. In this case, all affected populations undertaking recovery should have access to appropriate technical advice to ensure their own safety and that of their families. Advice should include risk mapping, building standards and guidance for safer construction. Although there are several examples of good technical assistance initiatives in Nepal, in challenging circumstances, the defining story is of uneven and insufficient coverage, with hundreds of thousands of households left without adequate access to information, training or advice.

Despite warnings from previous disasters and the efforts of many involved in Nepal, no institutional arrangement or consolidated plan emerged to ensure technical assistance for housing recovery reached all affected communities after the 2015 earthquake. Estimates indicate that compared to other disasters, considerable resources were mobilized to support housing recovery in Nepal. The Nepal case illustrates that a lack of planning can be as critical to the outcome as a lack of funding.

As disaster losses and rehabilitation needs become larger, and as Government and assistance capacities and resources become more stretched, technical assistance activities will need to be more effectively planned and implemented at large scale. Development partners will need to act with greater predictability, coherence and efficiency assisting Governments and communities to achieve more equitable and comprehensive outcomes.

The 2015 earthquake's rural impact

Earthquake damage in rural areas, May 2015. © Shelter Cluster Nepal.

Typical brick multi-story house type, prevalent before the earthquake.

Shelter constructed by family using salvaged stone and new CGI roof sheets, 2015.

The 2015 earthquake's urban impact

Harisiddhi village, Lalitpur, May 2015. © Habitat for Humanity International/ Ezra Millstein.

Damaged historic buildings one year after the earthquake, 2016.

Destruction of secondary towns in rural districts.

1 HOUSING FINANCE

Member of a microfinance group counting the installment money she is repaying for the housing loan she had borrowed. © Habitat for Humanity Nepal.

Cash grants alone are insufficient as a housing recovery financial strategy. Additional measures are needed to address affordability.

Housing reconstruction and rehabilitation after the 2015 earthquake has been described by some commentators as insufficiently financed by the Government of Nepal, resulting in slow progress and households incurring debt in order to rebuild their homes.

How to afford the timely reconstruction of private housing is a recurring challenge after disasters, for the affected households and communities and for the Government.

Although the Government of Nepal prioritized and implemented an unprecedented financial assistance (or cash grant) program, housing recovery needs remain. For future housing recovery policies to be more effective lessons need to be learned from the successes and problems in Nepal and options explored to address housing finance and affordability.

It is important to acknowledge the significance of the cash grant program, considering the economic and operational difficulties in Nepal, but also to recognize the limitations of relying solely on cash grants as the only financial strategy to support housing recovery. To address affordability and accelerate housing recovery, additional investment strategies are needed to support the rehabilitation and development of the construction sector and additional housing finance mechanisms are needed for households to access credit on appropriate terms.

"Access to finance affects when households can start rebuilding, how long they take, the choices of what they can build and whether or not they reduce risks"

What happened in Nepal?

The Government of Nepal support for housing recovery

About 4.5 million people lost their homes in the 2015 earthquake when 20% of the national housing stock was destroyed or damaged.

Over US$ 100 million in cash grants and in-kind material assistance was provided to households in the emergency response to contribute to meeting shelter needs. Financial assistance through cash grants was committed by the Government of Nepal for housing reconstruction for over 825,000 households and provided to over 750,000 households by mid-2019 following comprehensive assessment and grievance redressal processes. This represents a commitment of over US$ 2.4 billion, of which US$ 1.7 billion has already been disbursed after establishing mechanisms in cooperation with the banking systems.

Earthquake damage and losses were estimated at over US$7 billion or one third of national GDP (2015). Comparable losses of one third of GDP would mean 340 billion USD in Indonesia, or US$ 1.4 trillion in the Netherlands and Belgium whose combined population at 29 million is about the same as the population of Nepal.

The Government of Nepal commitment of over US$ 2.4 billion USD in financial assistance for private housing recovery alone should also be considered in the context of the Government's total national budget, which in 2016 was 7 billion USD. In addition to financial assistance, the Government invested in the recruitment of approximately 3000[3] dedicated technical staff and other measures to support housing recovery.

The number of houses destroyed and damaged was estimated at 525,000 in the 2015 Post Disaster Needs Assessment (PDNA) when the Government made its initial commitment to provide financial assistance to all eligible households. Subsequent detailed damage assessments increased the figure to over 825,000,

3 Including 2950 engineers deployed to affected districts, plus technical and administrative personnel at national level.

and the Government has had to increase their recovery budget in order to deliver on their commitments, despite shortfalls in pledges of international assistance funding for recovery. In response to concerns about affordability, the Government also increased financial assistance per household from US$ 2000, as initially proposed, to US$ 3000, alongside other financial assistance packages specifically for vulnerable groups.

Affording reconstruction

The majority of rural houses destroyed by the earthquake were substantial stone or brick multi-storey structures, housing large or joint families, storage of food and accommodating domestic livelihood activities. In urban areas most of the earthquake affected houses were also complex, including historic brick and timber structures and mixed use buildings accommodating workshops and other uses.

Households constructed over 650,000 temporary shelters to ensure they had lodgings in-situ before the first winter in 2015 and until reconstruction was completed[4]. They made considerable progress on repairs, retrofitting and on new construction despite many logistical challenges. Almost 300,000 have completed new buildings by 2019[5].

Resources for reconstruction included salvaged materials, household and community labor, remittance and household savings and income in addition to Government financial assistance. Across the world the majority of households of all incomes need to access financial resources, including credit, to buy or build a safe and durable home. In Nepal many earthquake-affected households used credit and even then they could often only afford to build quite small houses that may be safer but may not meet all their needs.

The vast majority of the population d oes not have access to formal banking credit, which is generally available at around 18%. Instead, they have to borrow informally at rates ranging from 20% to over 40%, from family members, cooperatives and from money lenders. A HRRP survey in October 2017 found that over 55% of households had taken, or were planning to take out, a loan to finance reconstruction of their home[6].

Housing reconstruction costs varied widely. Within rural districts those living far from markets and roads incurred high transport costs. In urban areas, demolition, restricted access and complex construction resulted in high costs. Prices recorded for construction-grade aggregate in parts of Dolakha and in Nuwakot were 8 times those recorded in Dhading district. Unskilled and skilled labor rates in Sindhuli were half the rates recorded in Gorkha[7]. The Government has provided supplementary financial assistance to mitigate the increased challenges for extremely vulnerable households and to offset the higher costs in heritage settlements.

Post-disaster assistance cannot comprehensively address underlying low national economic capacity. Annual household consumption data in Nepal, a proxy for household incomes, shows an average of US$ 3200 per household in 2015[8]. The economic capacity of the state is also limited and was affected by the earthquake and subsequently by the fuel crisis of 2015-2016.

Expectations that a state can 'compensate' households for the full value or replacement costs of their homes and household goods are unrealistic in most cases. Such expectations undermine the credibility of the state. Countries that operate state insurance schemes, to cover or contribute to housing replacement costs, require mechanisms to ensure compliance with building codes, payment of premiums by policy holders and risk-financing by the Government.

In Nepal, the Government is exploring insurance of newly (re) constructed houses in order to externalise the risk and to ensure predictable payments for affected households in the event of future shocks. Broader national rates of compliance with building codes and participation in property insurance are starting from low levels and increases will take time.

4 Shelter Cluster Nepal. Nepal Earthquake recovery Monitoring Assessment. https://www.impact-repository.org/document/reach/9c64cf74/reach_npl_report_shelter_recovery_monitoring_assessment_nov2015.pdf

5 Government of Nepal Press release December 2018. https://reliefweb.int/report/nepal/three-years-reconstruction-77-private-housing-80-schools-and-95-progress-Government

6 HRRP Cost of construction report. October 2017. https://www.hrrpnepal.org/uploads/media/VEcWsqlBkOwoAgUQ2Sbj_2017_12_04.pdf

7 HRRP 2019. *Housing Cost Calculator*

8 Central Bureau of Statistics(CBS) UNDP Annual Household Survey 2015/16 Major Findings http://old.cbs.gov.np/nada/index.php/catalog/85

Family in front of reconstructed house. The new house is small and single story; the destroyed house was large and double-story, Rasuwa 2018. © Housing Recovery and Reconstruction Platform.

Rural households had to reconstruct animal shelters and storage buildings as well as houses to safeguard their livelihoods.

Typical rural house type prevalent before the earthquake, with verandahs and storage for livelihood and domestic activities.

Are we learning from other disasters?

Owner driven housing reconstruction and financial assistance

Successful housing recovery outcomes after the 2001 Gujarat and 2005 Pakistan earthquakes have contributed to promotion and adoption of 'owner-driven' housing reconstruction policies based on financial assistance to households. 'Owner-driven' reconstruction strategies have been more effective than direct construction, by Governments, NGOs or contractors, to support very large numbers of households cost-effectively and transparently, and to facilitate diverse housing choices and rapid reconstruction. However, 'owner-driven' housing reconstruction programs may also be characterized as primarily market-driven and criticized as likely to reinstate or exacerbate pre-disaster inequities or vulnerabilities. Experience from many disasters shows that some households and groups struggle or fail to rebuild, and that 'owner driven' strategies need to adapt in order to identify and support those in most need and to address complex issues with more tailored financial mechanisms. Humanitarian agencies commonly respond by targeting (additional) assistance to selected individual households, but rarely reach significant numbers. Recovery policies and financial assistance systems require structural improvements to ensure they work better for all vulnerable households and communities, including through strengthening grievance redressal and progress monitoring mechanisms.

Ideally 'owner driven' programs build upon analysis of the local housing sector and strengthening housing construction capacity. Financial assistance through cash grants for households revives local markets, generates local employment and can be linked to risk reduction measures, but household level funding is not the only way to invest in housing recovery. Strategies to rehabilitate, upgrade or expand building material production and distribution can mitigate inflation in reconstruction and potentially offset costs for households as effectively as household cash grants. Construction sector businesses may have lost premises, stock or equipment and face challenges to access credit. Supporting business recovery may be on a grant or loan basis. Funding infrastructure and transportation rehabilitation or development can offset high logistical costs and provide lasting benefits in improved connectivity.

Apart from funding after disasters, investment to strengthen housing systems to function better in normal times can mitigate the impacts of disasters and improve the prospects for future housing recovery; in other words, make housing systems more resilient. Nepal could analyze the performance of the housing sector (materials, labor, finance supply) since 2015 to identify factors that affected the pace and cost of reconstruction and options for how constraints might be addressed to support the next phase of recovery and to better prepare for future disasters, including other types of disasters and in other areas of the country.

Financial assistance through cash grants for housing recovery is not housing finance

Financial assistance through cash grants, (also referred to as 'cash transfers' or 'social transfers'), is a core component of owner driven housing reconstruction and rehabilitation programs over the last two decades. The policy decision taken by the Government of Nepal to provide conditional tranche cash transfers through the banking system was based on evidence of previous successful cases. The vast Government of Nepal cash transfer program for housing recovery was undertaken in arguably the most difficult conditions.

The growing promotion and prevalence of cash transfers in global emergencies including in emergency shelter programs has been more recent. An estimated over 50% of all humanitarian assistance for shelter following the 2015 Nepal earthquake, 2016 Hurricane Matthew in Haiti and 2017 Hurricane Maria in Puerto Rico and Dominica was in the form of cash. The increased use of cash support in disasters is building on expansion in social protection or social safety net programs, expansion in digital technologies and financial services including mobile phones and internet access.

Cash support increases vital access to resources, addressing a key barrier to timely recovery. Centralized and institutionalised financial disbursement and information management systems also generate data that facilitate accountability and tracking of reconstruction progress. Attaching conditions to cash transfers can leverage compliance with building regulations and the adoption of risk reduction measures, particularly where

Single story two-room brick masonry house, incomplete and non-compliant, Suryabinayak. © Housing Recovery and Reconstruction Platform.

the appropriate level to reduce vulnerability to risk is at household level, such as in the case of earthquake or wind damage. However, stakeholders need to consider incentive and enforcement mechanisms to ensure compliance outside of and after disaster-related cash grant programs.

Cash grants for shelter or housing recovery are a disbursement mechanism for humanitarian or development assistance, but they only constitute one component of a well-functioning housing finance eco-system which should also include affordable and inclusive access to credit, participation in housing insurance and property taxes.

Housing affordability and housing recovery affordability are a function of two key factors:

1) **the cost of housing (to buy, build or rent),**
2) **household capacity to pay (savings, income, grants, credit).**

Cash grant programs tend to be designed to monitor and account for disbursement of cash and compliance with building codes, but not necessarily to track affordability in terms of monitoring the costs of materials, labor or construction, the costs of credit or levels of debt in reconstruction. In many post-disaster situations costs increase significantly due to increased demand, reduced supply or due to changes in standards and affordability. Rising costs are a priority concern affecting the rate of reconstruction and the size and quality of houses. Authorities charged with devising recovery policies and managing recovery programs are often

Urban plots are often constrained for access and expensive to build on.

slow to pay due attention to monitoring of costs or ability to pay and slow to devise interventions to address affordability factors.

Access to finance

A key factor affects housing recovery outcomes. Access to finance, and the terms and conditions involved, affects when households can start rebuilding, how long they take, the choices of what they can build, the quality they can achieve and whether or not they reduce risks or reinstate vulnerabilities. Access to finance is vital when local coping systems are overstretched; to accelerate reconstruction and mitigate the risks of forced displacement and the impacts of long term accommodation in emergency or temporary shelter.Inadequate access to finance is a major barrier to reconstruction in urban areas where construction costs may be very high, and interim rental accommodation consumes the household resources, slowing the pace of long term recovery even more.

Access to finance – particularly conditional finance – can play a critical role in promoting compliance with building codes, and needs to be developed and promoted as much as technical assistance and enforcement programs. Appropriate financial products and services for all property statuses and income levels are required for timely and quality housing recovery and for a more resilient housing sector.

If housing recovery, reconstruction and retrofitting are to be faster, reduce risks and achieved by all, including vulnerable households and urban households, there need to be more options for households to access finance.

"Rising costs affect the rate of reconstruction and the size and quality of houses. In many post disaster situations construction costs increase significantly due to increased demand, reduced supply or due to changes in standards"

What can we learn from Nepal?

Funding house reconstruction or housing and settlement recovery

The earthquake housing cash grant program in Nepal as a Government flagship initiative, had major political, financial, administrative and logistical issues to resolve, not least establishing systems from scratch and the 50% increase in the number of eligible households. The Government, with already limited capacity, was constrained in their efforts to devote attention or resources to other aspects of housing recovery investment. Early efforts to convene construction sector stakeholders or support supply chain development gained little traction. The assistance community was also preoccupied with operationalizing cash grants and with associated technical assistance activities.

The impact of the earthquake and needs for recovery were determined across all sectors. Government funding for housing recovery was therefore dependent on the extent of losses and needs in other sectors as well as the resources available. Structural damage to buildings constituted the highest proportion of losses, as is commonly the case in earthquakes. Housing losses were conservatively estimated at 3.5 billion USD or 50% of total losses in the PDNA and financing requirements for housing (rural and urban) were estimated at US$ 3.76 billion of US$ 8.38 billion total requirements in the Post Disaster Recovery Framework (PDRF). School reconstruction, at US$ 1.8 billion was the second largest financing requirement[9].

Other types of disasters have different implications for funding housing recovery. Flooding or cyclones for example may cause extensive agricultural losses affecting food security and livelihoods. Damage to roads, bridges, electricity and water supplies may require prioritization in Government funding and activities. Investing in housing and settlement recovery and risk reduction may be better addressed through flood mitigation, watershed management or infrastructure works and the rehabilitation of material production and distribution networks instead of financial assistance only to households, particularly in areas of frequently recurring flooding.

On the other hand, there may be greater potential to tailor parametric insurance programs for weather-related risks, providing predictable, rapid funding to underpin cash grant support to households as a contribution to housing recovery.

Learning, adapting and communicating

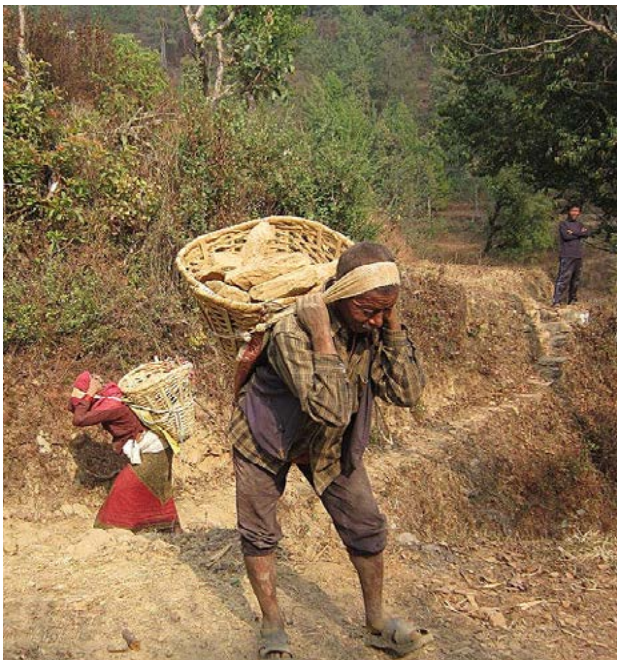
Learning from the earthquake on financing housing recovery will need to adapt for future disasters. In Nepal the increasing prevalence of flooding and extreme weather events will require stakeholders to develop a range of strategies to finance both housing and settlement risk reduction and reconstruction utilizing public and private insurance, infrastructure investment and market interventions as well as social transfers / cash grants.

The key lesson from the Nepal earthquake on financing housing recovery is that cash transfers alone are not sufficient as a housing recovery strategy. The vast experience gained since 2015 in both emergency and reconstruction cash transfers may also provide lessons in order to better plan and implement programs in future, in Nepal and elsewhere.

Future financial assistance strategies would also benefit from greater clarity including the continuing need for better communication around cash transfers in housing recovery, to address misunderstandings which have occurred in other countries and also in Nepal. Examples include expectations that cash transfer financial assistance is 'compensation' and therefore should vary according to the value of losses, and interpretation that the amount of financial assistance should determine housing standards or designs or should be sufficient to cover the full cost of reconstruction or retrofitting, rather than being understood as a subsidy or contribution to the cost.

"Cash grant programs are designed to monitor the disbursement of cash and compliance with building codes but not to monitor the cost of materials, labor or construction or levels of debt incurred"

9 http://www.nra.gov.np/np/news/publicationDetails/DbV4Ej709l1NnSjO-U0kDOFxWFcdSLhwxHH39Ep-PW8
http://www.nra.gov.np/en/news/publicationDetails/bXuwcPf1TsZ10xuMKZ7x2W3-2pDHyi1mM256lkqPdlM
http://www.nra.gov.np/uploads/docs/wQxngUUy2r160512083450.pdf



Carrying stones to a construction site in Kavre. Transporting materials is a major challenge and cost . © Housing Recovery and Reconstruction Platform..

Cement concrete block production Dhading, 2016.

"A HRRP (Housing Recovery and Reconstruction Platform) survey in 2017 found that over 55% of households had taken or were planning to take out a loan to finance reconstruction of their home, at interest rates of 20% to over 40%"

Learning from Stakeholders

Consolidating the perspectives of different stakeholders in relation to funding and transfers can provide a more comprehensive analysis, including the following:

1) the Government (financing, managing and tracking); 2) the banking sector (processing and disbursing); 3) households (accessing and utilizing); 4) markets (receiving); 5) technical assistance agencies (financing and accompanying), and 6) donors (contributing and evaluating).

The following guiding questions may provide learning to inform future policies and implementation:

- ***How did the timing of, and conditions attached to, cash transfers affect housing recovery outcomes?***
- ***What were the administrative burdens for the state and for households of determining eligibility and processing cash transfers?***
- ***What was the capacity and coverage of financial service providers and how did they affect housing recovery outcomes?***
- ***What household resources were expended on housing recovery since 2015, including credit?***
- ***What was the impact of the earthquake and recovery on the construction sector since 2015 including professional services, material importation, production and distribution, labor and contracting?***
- ***What systems could monitor costs of construction materials, labor, services and works as long term mechanisms for continuing recovery after 2015 and for future disaster recovery?***
- ***How could Government and non-Government protocols and systems for cash transfers be improved for future disaster response in Nepal?***
- ***How could households, communities, financial service providers and the Government increase their financial resilience to mitigate future shocks?***
- ***What measures could make continuing recovery more affordable?***

CONCLUSION

Almost 2 billion USD has already been channeled directly and cost effectively to all affected households since 2015 to support their housing recovery after the earthquake. This is a major achievement for a low income country like Nepal. The scale of the undertaking inevitably generated issues to be resolved, many of which present opportunities for learning and future improvements. Learning from the Nepal case should also highlight the limitations of cash grants alone to address the financing of housing recovery.

The emphasis in housing recovery policies by Government and development partners and in public debate is placed on the amount of financial assistance provided in cash grants, including the funding level per household and the numbers of households. There is far less policy emphasis placed on reducing costs or reducing inflation of costs of housing reconstruction for households, or investing in measures to address affordability.

Housing recovery affordability depends on two key factors: 1) housing costs and 2) household ability to pay including through savings, grants, income and credit.

For future housing recovery stakeholders, in Nepal and elsewhere, the 2015 earthquake experience highlights that timely and affordable housing recovery requires diversified strategies to 1) rehabilitate and develop the construction sector to reduce costs and 2) develop housing financial services and access to credit on reasonable terms to address the ability of households to meet those costs. Such diversified strategies will require diversified funding sources, actors and mechanisms.

2 URBAN

Local residents dismantling damaged buildings, 2015, Bhaktapur.

Urban recovery was neglected, again. How might urban authorities and communities be better supported?

The 2015 Nepal earthquake is perceived as a rural disaster although the number of houses destroyed in urban areas is comparable to the 2010 urban earthquake in Haiti. Urban recovery has been problematic and is progressing more slowly and costing far more for households than rural recovery. Experience from other disasters, borne out in Nepal, indicates that urban housing reconstruction and rehabilitation is typically complex and may take over a decade, not least because urban communities and municipal authorities have received inadequate technical or financial humanitarian support.

The global development community has recognized that crises are increasingly taking place in urban locations and they have developed policies, programs and tools to ensure humanitarian response is more effective in urban contexts. However, policy commitments are not translating sufficiently into practical commitments and actions in real disaster situations, including in Nepal.

If development partners are going to play a key role to ensure urban recovery is more successful in future disasters, they need not only to advocate policies and promote best practices, but also learn from their capacity shortcomings and institutional constraints to operationalize those policies and practices after the earthquake in Nepal.

Supporting urban recovery is not only the responsibility or purview of Governments and NGOs. Urban expertise in land use planning, infrastructure, cultural heritage and communication from professional bodies, commercial and civil society organizations can play vital roles to inform and enable recovery. Since capacity is a critical concern for technical assistance, this wider range of expertise needs to be optimized.

What happened in Nepal?

The Nepal 2015 earthquake urban disaster and recovery prospects

The 2015 Gorkha earthquake is characterized as a rural disaster, due to the extent of remote rural areas affected across 32 districts. An estimated 720,000 rural households were assessed as eligible for reconstruction compared to 105,000 households in urban areas, representing approximately 87% rural and 13% urban.

The Haiti 2010 earthquake on the other hand was characterized as a major urban disaster with 105,468 homes destroyed, virtually the same number as in urban areas in Nepal. Just over 100,000 buildings were destroyed in the 1995 urban earthquake in Kobe, Japan.

From the outset in April 2015 in Nepal, humanitarian assistance was focused on supporting rural communities (in the 14 most affected districts). Of over 300 organizations who participated in the shelter response only a small number operated in urban areas, most with limited capacity and resources. A very limited number continued support from 2016 onwards in reconstruction and rehabilitation. Humanitarian donors and implementing agencies cited greater disaster impacts and higher levels of poverty and vulnerability in rural areas. Even in rural districts there were towns seriously affected by the earthquake which needed specific urban measures to support the recovery of administrative functions, markets and distribution capacity to serve rural recovery. Generalisations about vulnerability may have also overlooked cases of extreme urban poverty, disadvantage and exclusion, exacerbated by the disaster and in recovery.

The Government of Nepal's PDNA in 2015 combined analysis of rural and urban housing and settlements. Urban housing and community infrastructure recovery was given dedicated attention with its own chapter in the Government of Nepal's PDRF in 2016, including urban specific policies, projects and budget proposals.

However, several components of the framework's urban housing and community infrastructure PDRF were aspirational, as funding, partner capacity and mechanisms for implementation did not materialize to ensure the framework was further developed and realized. Urban recovery was not supported by sufficient institutional capacity to address the complex range of issues involved.

Government financial assistance for urban housing reconstruction was successfully mobilized, although later than in most affected rural areas and with limited associated technical assistance capacity to identify and address rehabilitation and reconstruction challenges. Both Government and humanitarian stakeholders focused on assistance for private housing reconstruction and rehabilitation. There was insufficient corresponding investment in the community infrastructure and settlement recovery measures outlined in the PDRF which were critical, particularly in urban recovery including urban planning, infrastructure rehabilitation and development, municipal governance and socio-economic regeneration.

The towns and neighborhoods affected and issues for recovery

Nepal has a unique and sophisticated urban built heritage of national and international significance. Sixty-three heritage settlements, including 52 in the Kathmandu valley, experienced earthquake damage to temples, squares, water reservoirs, shops and private housing, representing extensive loss of cultural heritage. Appropriate reconstruction and rehabilitation required high levels of engineering, architectural and construction knowledge and skills. Experience from previous disasters in other countries shows that built heritage is not only at risk of disaster impacts, but also at risk of destruction during recovery, as buildings are inappropriately repaired or buildings that could be repaired are torn down instead; sound buildings are adversely affected by adjoining reconstruction works or incongruous new buildings diminish the character of the neighborhoodor village.

Many of the historic towns and neighborhoods damaged in 2015 were already in physical and economic decline before the earthquake. The lack of maintenance of such buildings contributed to a high proportion of damage. The lack of financial capacity is a barrier to rehabilitation. Urban recovery is not only a question of replacing buildings, even appropriately designed and constructed buildings. These towns, communities, urban blocks and streets, and individual properties, are dealing with a precarious present and an uncertain future.

Experience in crisis recovery in urban areas shows that urban housing reconstruction and rehabilitation can be more complex than in rural contexts, with larger, more elaborate and more expensive buildings, multi-family and rental dwellings, and informal and contested property status. Housing recovery is affected by more extensive regulatory and planning processes and the rehabilitation and upgrading of circulation and transportation, electricity, water and sewerage systems, institutional, social and economic facilities and services.

Urban contexts are not all the same. Apart from the differences between new and historic towns, there are significant differences in the recovery issues arising in remote market towns compared to the capital city, between low and high income, informal and formal, residential and mixed-use neighborhoods. Combinations of factors affect the recovery policies and strategies required and the range of expertise and experience needed to support their implementation.

Since 2015 major transformations in local Government including municipal Government have taken place across Nepal. Institutional systems are evolving but financial and personnel capacities remain weak, including in earthquake affected towns which faced massive increases in their workloads to address recovery but received limited support.

Insufficient time

Apart from insufficient funding and capacity, plans by Government and humanitarian stakeholders to support recovery were insufficient in duration, considering the catastrophic scale of the disaster, the economic situation and the complexity of urban recovery needs. NRA activities were prescribed for completion within 5 years. Humanitarian emergency and reconstruction funding was largely programd to be disbursed within one to three years.

Urban recovery takes time. The rehabilitation of infrastructure systems and the reconstruction of destroyed areas or individual buildings require technical and

financial assessments, preparation and analysis of options, including the potential for upgrading, before the development of detailed plans and often protracted implementation. Time is also needed to ensure adequate processes of decision making including consultation, iterative piloting and revisions and establishing consensus. Recovery requires balancing or trade-offs between speed, quality and cost in planning and implementation. While emergency interventions have temporary impacts, rebuilding towns or neighborhoods has long-term consequences and involves considerable resources.

The focus in recovery budgets tends to be on capital works, but constraints also occur due to the cost of human resource inputs. Time is a major factor in the cost of technical expertise or technical assistance activities. Maintaining personnel over several years, including through intermittent delays, can be prohibitively expensive. Short-term inputs may cost less but may not be effective. Multi-annual commitments are required if the objective of technical support is not only task-oriented construction but the strengthening of urban systems including municipal authorities.

Insufficient assistance and insufficient progress

Although urban destruction in Bhaktapur and Chautara provided defining images of the 2015 earthquake, urban recovery has not received sustained attention or support. Government, development partners, technical professionals and businesses, national and international media have not managed to mobilize their capacities and resources to support urban authorities and communities. Urban communities feel forgotten.

The majority of the development partners – financing partners, UN agencies, and I/NGOs – were unable and unwilling to get involved in supporting urban housing and settlement recovery after the earthquake beyond relief activities, research and small initiatives. Few participated in the preparation of the urban housing and community infrastructure recovery framework in 2016, or subsequently assisted national or municipal authorities to analyze, plan for or support urban recovery. Development partners cite preoccupation with rural recovery, resource constraints, aversion to financial and reputational risk and insufficient expertise to address politically, institutionally, technically, socially and economically complex recovery issues as reasons for their absence.

Urban housing reconstruction at the end of 2019 was progressing at half the rate of rural housing reconstruction. Issues including minimum plot standards and land acquisition for road widening are proving intractable and delaying many households from making decisions about their futures. High costs are constraining others from starting or completing (re)construction or require high levels of expensive credit.

Urban reconstruction is perceived as slow. But there are still many opportunities to provide technical advice for individual properties, and to support communities and authorities to develop and implement local recovery initiatives. Timing may be less of a problem than the absence of mechanisms to facilitate planning and to mobilize expertise and resources for settlement recovery or for the urban renewal, upgrading and development needed. Urban recovery needs to be more than reconstruction of earthquake-resistant houses. Interventions in governance, planning, infrastructure, livelihoods and community are needed to ensure the short-term recovery and the long-term physical, social, economic and cultural sustainability and resilience of the affected towns and villages.

Earthquake-damaged unoccupied private house and shop propped for safety on busy public street, 2019, Bhaktapur.

Sankhu Housing Recovery 2015-2020

2016

Damaged historic terraced buildings not weatherproofed or stabilized.

2019

New building under construction adjoining damaged and abandoned building.

2019

New construction, reinforced concrete frame but unrestrained brick walls. Municipal guidelines on materials and height applied.

2020

Temporary shelter on the site of a destroyed building, no reconstruction yet .

Are we learning from other disasters?

Global good intentions to support urban disaster response and recovery

Following the 2010 Haiti earthquake and recent crises in the Middle East and North Africa, development partners acknowledged that they were ill-prepared to effectively support urban authorities and communities. With already more than half of the world's population residing in cities and rapid urbanization underway, including in fragile settings, several development partners and networks have developed policies and invested in training to ensure they are better prepared and have capacity to better respond to urban crises.

Experience in urban approaches including rental support, geospatial analysis, participatory urban planning and area-based coordination has been documented and promoted. The settlements working group was established by the Global Shelter Cluster and The Global Alliance for Urban Crises was launched at the 2016 World Humanitarian Summit among other initiatives. Networks of cities including the Global Resilient Cities Network promote inter-city learning including on crisis recovery.

Notwithstanding the emphasis over the last decade on urban disasters in global humanitarian policies, development partners were unable to play a significant role in the emergency response or in subsequent recovery in urban areas in Nepal. They were unable even to effectively highlight the significance of urban impacts of the earthquake or to advocate for appropriate support. If high-profile, well-funded responses involving hundreds of agencies like the Nepal earthquake cannot mobilize urban expertise and resources, smaller and lower profile urban disasters may expect even less engagement and support.

The global development community needs to accelerate the translation of awareness of and concern for urban crisis needs into ability to respond to those

Community rehabilitation, Sankhu, 2019. Cultural recovery also requires attention to housing, to how people build and live together in homes, villages and neighborhoods.

needs. This requires not only promotion of good urban practices, but analysis of failures by the humanitarian community to provide support in urban crises, including funding mechanisms, organizational structures, skillsets and time frames. Nepal provides a valuable case through which to investigate all of these factors. Without diagnosis and evidence of shortcomings, and steps to address them, the next cities affected by disasters are likely to be let down by the humanitarian system.

Rethinking urban humanitarian assistance

The global community of development partners promoting urban policies describe urban contexts and urban crises as complex and their aspirations for response and recovery activities promote analysis of, engagement with and sustainable improvement of urban systems. But there appears to be a wide gap between the intentions of development partners to support urban recovery and the reality of what they manage to do. This gap can lead to unmet high expectations and uncertainty or to frustration, undermining relationships with affected communities and with Governments, with the risk that development partners are relegated to a position of irrelevance.

Dhading town serving earthquake affected rural areas.

Streets in Chautara blocked with building rubble after the earthquake, 2015.

There are two options to close the gap. One way is to increase the capacity of development partners to deliver on their ambitious agenda. Another way is to reduce the level of ambition and ensure greater predictability and delivery. Development partners might reflect upon their mandates, capacities, resources and constraints and consider how to play a more selective and strategic role in urban recovery including how to support municipal authorities. Defining and operationalizing a more specific role might be based on humanitarian principles such as a protection agenda, or on domains of expertise such as information management.

Many agencies have been focused on internal development, improving their own knowledge, skills and mechanisms to plan and implement urban programs. However, if individual agencies and the wider development community are going to work differently, they might better look outwards and collectively. A better understanding of the other actors in urban recovery, including the Government, the built environment sector and civil society, and their needs, may help development partners to determine if, why and how they can bring added value to supplement or support such actors. A support approach will require greater attention to skills and mechanisms for collaboration and partnership and greater degrees of flexibility than humanitarian funding currently affords.

Questions about how to address the failure of the humanitarian community to practically deliver on global urban recovery commitments are not only concerned with implementing agencies. The most significant failures and therefore the most urgent need for change lie with humanitarian financing agencies including institutional donors and banks. Donors need to reflect upon the level of funding provided to the Nepal urban response and recovery, whether it was adequate or not, and if not, why not. Analysis is needed on the barriers donors faced and how they might be overcome in future, but a fundamental review is also needed to better define what outcomes they want to secure or support, and, critically how they intend to do so.

Bungamati damage to houses and workshops, 2015.

If the funding and implementing capacity of development partners was overwhelmed and unable to support urban recovery in Nepal in what they describe as a relatively small urban case, in what position will they be, if (or when) there is a far larger urban disaster in Nepal or elsewhere?

"105,000 urban houses were destroyed in the 2015 Nepal earthquake, a similar number to the 2010 Haiti earthquake (105,000 houses) and 1995 Kobe earthquake (100,000 houses)"

What can we learn from Nepal?

Capacity options, local urban expertise

Earthquake experts have warned for decades about the risk of a major urban disaster in Kathmandu metropolitan area which may cause devastating damage in the densely built city that covers 50 square kilometres. The 2015 earthquake was not the anticipated catastrophe for the capital.

The urban areas most affected by the earthquake fall into two categories: 1) small but growing administrative, service and market towns in rural districts, and 2) small historic villages, towns and neighborhoods of cultural importance, mainly located in the Kathmandu valley.

Compared to remote rural areas or very large cities, small towns and neighborhoods present advantages for the planning and implementation of technical assistance for disaster recovery. Communities can be convened relatively easily to participate in consultation, information-sharing training activities or demonstration events. There are more diverse profiles of skills and expertise available and more local communication

Patan new construction on constrained site planning for increased number of storeys, 2016.

channels. Local authorities have strong local knowledge and networks.

Apart from resources local to the towns themselves, Nepal has extensive national urban expertise in the professional bodies, commercial, academic and development sectors, in topics including building conservation, hazard resistant engineering and construction, urban planning, infrastructure, environmental sustainability, financial services, information management, tourism, marketing, media and socio-economic research. Many local experts engaged in supporting recovery; through initiating and participating in projects, providing advice and advocacy, carrying out research and undertaking contracts. Opportunities were limited by the absence of a mandate or platform to engage or to share their expertise and by constraints in terms of time, resources and access to resources.

The Government sought inputs from local experts, but a broader mechanism could have mobilized significantly more capacity. A human resource strategy might have been based on analysis of comparative advantages and disadvantages; on dividing and allocating tasks.

The issue of resources would still have been a barrier to many but could have been supported through greater access to humanitarian funding, to enable policy advice, advice to communities and households and the development of pilot initiatives and community-led programs.

Additional external assistance could have been cost-effectively based on supplementing and supporting (rather than displacing) local expertise for example with training or exposure to relevant cases, through peer exchange advice from cities that have faced similar recovery challenges like Bam in Iran, Bhuj, in India, Muzaffarabad in Pakistan and Yogjakarta in Indonesia, or inputs of particular topics such as retrofitting of historic buildings or green infrastructure. In Nepal, 2950 young engineering graduates were recruited to support housing reconstruction. Young graduates in other disciplines from archaeology to IT to sociology could have been deployed to support urban authorities and communities.

Drawing upon and investing in more local Government and civil technical capacity would have helped to meet

the human resource capacity deficit to facilitate reconstruction and rehabilitation and, as importantly, would have provided invaluable learning and experience for the people who make and manage the city, contributing to urban resilience in Nepal. Lessons learned from localization of technical assistance would be useful in future crisis response in Nepal, for other governments, cities, communities and civil societies affected by disasters and for the global humanitarian community.

Urban recovery as part of urban development and regeneration in Nepal

As is the case elsewhere, urban recovery after the 2015 earthquake in Nepal, like urban recovery after disasters elsewhere, is inextricable from urban development concerns that existed before the earthquake and continue today. The district towns need to manage growth. The historic towns need to manage decline and change. Recovery is overlaid on these basic trends, accelerating change, consuming resources and bringing additional challenges and opportunities.

The limited recovery mandate of the NRA needs to be combined with wider institutional mandates for urban development and for urban renewal or regeneration. Multiple stakeholders, local and national, state and non-state need to work together, and leverage different sources of investment and expertise on topics from local livelihoods to sustainable infrastructure to compliance with building regulations.

Although the PDRF set out to address urban housing and community infrastructure recovery, to date the emphasis has been on private housing. Attention needs to turn now to the potential of investment in the public domain, in infrastructure upgrading and development, in community facilities and culture, in environmental regeneration, in business strategies, in the collective rather than the individual, particularly in the historic towns. This is essential for the Government to seize the opportunities of access due to earthquake damage, to reverse deterioration of conditions since the earthquake, to deliver visible tangible evidence of recovery progress and Government investment, and to inject much-needed funding into employment in communities facing high reconstruction costs.

A shift to a multi-stakeholder institutional framing of recovery as part of urban development or urban regeneration and a shift of focus to public domain recovery both require an extension of the urban recovery timeframe to at least 2025. Likewise, estimates of the time required for urban housing reconstruction and rehabilitation and the maintenance of associated recovery support programs seem to require a similar timeframe.

Urban recovery or reconstruction is not inevitable. Experiences from Japan to El Salvador show that some businesses never reopen, that some neighborhoods remain scarred for years, that heritage is irreplaceably lost and communities and families are displaced or fractured irretrievably.

The Government of Nepal and the development partners along with local and global urban stakeholders should not simply look at shortcomings in the urban response to date to inform the next case, but should consider themselves at a mid-point from where they can take stock and reorient for the next phase.

Urban housing recovery in Nepal required conservation and technical skills as well as social and economic regeneration expertise.

“ Although urban destruction in Bhaktapur and Chautara provided defining images of the 2015 earthquake, urban recovery has not received sustained attention or support. Urban housing reconstruction at the end of 2019 was progressing at half the rate of rural housing reconstruction”

The following guiding questions may provide learning to inform future policies and implementation:

- ***What total resources were invested in urban recovery in all sectors from 2015 to date?***
- ***What barriers mitigated the mobilization or optimization of financial or technical resources for urban recovery?***
- ***What is the scope of adequate urban recovery in Nepal?***
- ***What level of resources was needed for adequate urban recovery support in all sectors?***
- ***What time frames may be estimated for urban recovery in all sectors?***
- ***How can urban recovery in Nepal integrate into a wider institutional and longer term (5-20 years) process of urban development and urban regeneration?***
- ***Which stakeholders can support urban recovery, development and regeneration in Nepal and how can they be convened and enabled?***

CONCLUSION

After Haiti, global development partners acknowledged they were unprepared to respond to urban crises and they took several steps to redress the urban policy and capacity deficits. After Nepal, they will have to account for why so little humanitarian financial and technical assistance was provided to urban areas affected by the earthquake, why they remain unprepared to support urban recovery.

Either development partners need to make more drastic and wholescale changes, including to their skill sets, timeframes and funding mechanisms, or they need to calibrate their involvement to a more limited and deliverable role. They could adjust their role and systems to working more and better in partnerships, in support of municipalities, local professionals and civil society. Since capacity continues to be a critical constraint, strategies to harness a wider range of local urban expertise should be a priority.

Urban recovery in Nepal is constrained by narrowly defined asset-replacement housing policies and needs to be framed within urban development and urban regeneration processes with a wider range of institutional and civil stakeholders, flexible scope, diverse funding streams and longer timeframes. Urban recovery progress has been weak, but the scale of the challenge is manageable. 2020 could be seen as an opportune stage from which to launch a new phase, inviting renewed participation by development partner and civil stakeholders to support authorities and communities, through a different approach. The permanent loss or degradation of the historic towns and neighborhoods, through failure to support their recovery, would be a poor political, cultural and social legacy for the Government of Nepal and for all those who purport to support them.

3 INSTITUTIONALIZATION

Extensive skills, knowledge and data were developed in support of housing recovery. © Habitat for Humanity Nepal.

Institutionalization is about people as well as policies. Capacity is a recovery dividend.

Establishing systems only for reconstruction and dismantling them after a short period risks losing institutional memory, expertise and data. Efforts to transfer to long term authorities have proven difficult in several countries after disasters and may be expected to be challenging also in Nepal.

In the completion phase of the NRA, the Government of Nepal has to plan for future governance of the built environment and disaster risk management, when recovery support systems are no longer in place, the memory of disaster losses recedes and risk reduction must compete with other priorities.

Focusing primarily on transfer from the NRA to the yet to be established National Disaster Risk Reduction Management Authority (NDRRMA) may represent a narrow strategy. Institutionalization could be planned more broadly to encompass roles for a range of state and non–state stakeholders.

Institutionalization includes the establishment, allocation or transfer of authority and responsibilities and the formulation of policies and regulations. Institutionalization also includes people-centered processes of learning and change in individuals and groups and the transfer and sustainability of knowledge, skills and attitudes.

All those involved in supporting recovery have benefited from invaluable opportunities to learn through direct experience. Facilitating opportunities during the completion phase for training, reflection, documentation and discussion may increase learning and reinforce capacity to manage the built environment, reduce risks and respond to disasters in future.

Institutionalization appears to be a shared objective and therefore feasible to achieve. In reality, learning and institutional change are extremely difficult to bring about.

What happened in Nepal?

Nepal disaster management before and after the earthquake

Decades of initiatives to analyze, prepare for and reduce disaster risks in Nepal meant the country was in many ways well-prepared for the 2015 earthquake and for reconstruction afterward. Appropriate building codes were in place including provision for earthquake resistant housing construction, and associated training curricula for engineers and masons were already developed and in use. Discussions were advanced on the institutional architecture for disaster management. There was considerable capacity among Government officials, I/NGOs, academia and the private sector, and high levels of awareness and preparedness among local communities. However, the institutional architecture, policies and operational plans specifically for recovery were not in place and other systems also required development in order to support recovery, for example, financial services needed to be significantly expanded to facilitate disbursement of cash transfers.

The Government of Nepal took early steps to articulate a vision for recovery through the PDNA issued mid 2015, establishing the NRA by the end of 2015 and following up the PDNA with a PDRF mid 2016. Strategies for housing recovery were consistent from the outset and accelerated as priority.

Subsequently the Government made an unprecedented investment in building capacity through the recruitment and training of initially 2500 young engineers and subengineers deployed to the 14 priority affected districts in 2016 followed by an additional 450 to the 18 moderately affected districts in 2017. Efforts to build capacity at national level or to reinforce district and municipal authorities have been less ambitious. The strategic objectives set out in the PDRF 2016 do not mention institutionalization or sustainability as part of the mandate, roles or responsibilities of the NRA. Even topics like 'building capacity' of human resources are

only task-oriented to 'deliver reconstruction'.

The recovery dividend refers to the potential to strengthen systems and institutions and build sustainable capacity in disaster risk management through recovery. The dividend refers to the future; post-reconstruction. As the management of post-earthquake housing recovery moves into a completion phase, the Government of Nepal is looking at exit strategies including the transfer and institutionalization of data, learning and capacities for future. Many stakeholders are focusing on transfer of lessons learned from the NRA to the forthcoming NDRRMA, timing of the establishment of which is yet to be confirmed. The opportunity in Nepal also coincides with decentralization and efforts to strengthen local governance.

Training government engineers for housing recovery. © National Society for Earthquake Technology.

Training for building professionals, Nuwakot, 2018. © Housing Recovery and Reconstruction Platform, National Society for Earthquake Technology.

Are we learning from other disasters?

Institutionalization is challenging

Experience from recovery in other countries shows that event-specific reconstruction authorities have a poor record of institutionalization, including transfer of responsibilities to long-term disaster management authorities. It has proven difficult for successful policies implemented by the Earthquake Reconstruction and Rehabilitation Authority in Pakistan after the 2005 earthquake to be replicated by the Pakistan National Disaster Management Authority in subsequent disasters. Authorities in India and Indonesia cite challenges to transfer learning from disaster recovery in one area of the country to another.

The NRA may expect to face many of the same challenges. Issues include;

1) event specific authorities are mandated to focus on and investment in meeting reconstruction targets rather than institutional change;
2) limited terms are too short to deliver on long term processes;
3) reconstruction authorities are unable to transfer responsibility and liability for completion of contracts or programs to other authorities;
4) funding levels and administrative mechanisms including cash grants and inspection may be recovery specific and not sustainable in normal times;
5) disaster management authorities tend to focus more on preparedness and response than recovery and have different skillsets accordingly, and
6) responsibility for issues such as building codes and compliance lies with technical and local authorities to a greater degree than with disaster management authorities.

The effectiveness of institutionalization efforts often depends on how the authority charged with overseeing reconstruction relates to the long term national and local authorities apart from disaster management authorities, including whether they are integrated and implicated in joint planning, implementation and learning throughout the recovery process.

Institutionalization in Nepal can fortunately also draw upon extensive learning from pre-disaster initiatives (such as those supporting building code implementa-

Managing risks and urban development requires a multi stakeholder approach in rapidly urbanizing Nepal.

tion in municipalities) to capitalise on momentum after the earthquake and the new opportunities in devolved local governance.

Institutionalization needs multi-stakeholder and long-term mechanisms

Institutionalization tends to be assumed as the concern or responsibility primarily of the state, but institutionalization may be interpreted more broadly, for example in terms of transformation of thinking and practices, attitudes and values, markets and cultures and therefore the responsibility of a wider set of actors and institutions. Non-state stakeholders, including the commercial construction sector, professional bodies, financial service providers, media actors, academia and I/NGOs, need to be concerned about and take responsibility for sustainable progress through learning from their respective experiences in recovery. Institutionalization may be at the level of companies maintaining quality assurance systems or may involve processes such as revision to national third level curricula.

Lessons from other disasters indicate that large quantities of data are produced during recovery, but a high proportion is perishable or lost. Where and how to archive and securely maintain data generated during recovery for continued access and use is a challenge. Governments and development partners may find civil society options provide advantages such as the archives of academia, think tanks and professional institutes. They may be more flexible than Government and more durable than I/NGOs as well as representing expert stakeholder groups who will actively use and promote the data. Early planning for data capture and long-term retrieval can ensure critical data is continuously filed and necessary investment is made in appropriate information management systems. Anticipating future requirements can inform the type of data produced or collected, the methodologies and formats used, who is involved in collection, processing and analysis, mechanisms for validation, access and dissemination.

Analysis of the recovery after the earthquake should take account of pre-earthquake institutional and other factors. Such analysis of recovery should not stop or refer only to the specific project or institutional time frames, such as 2015-2020. Continuous or later monitoring of recovery progress and the longer term impacts of recovery interventions are also needed, as repercussions take years to become apparent. Analysis of the sustainability of recovery capacity or the institutionalization of risk reduction policies and practices has to be framed within longer timeframes.

What can we learn from Nepal?

The role of development partners in institutionalization.

Many development partners wish to support the Government of Nepal to institutionalise recovery learning. They might also explore the potential to support non-state actors, or sector-based multi-stakeholder initiatives. Development partners and the Government both need to be mindful that institutionalization as a learning and development process cannot be supply-driven or externally contracted. While support may include facilitation, the Government has to make their own commitments and efforts in order for change to be realized. Likewise institutionalization as a mainly policy drafting exercise will have limited impact compared to initiatives based on broad participation and ownership by officials who have played a range of roles in recovery and who may in future use a variety of lessons from risk management to data analysis to community conflict resolution.

Individual organizations and the collective humanitarian community also need to reflect on their own learning from the earthquake response and recovery, and the perspectives of Government, civil society and affected communities on their contribution. Humanitarian learning and institutionalization might be framed in terms of future crises and continued risk reduction in Nepal or might aim to contribute to structural changes to be applied globally, with different implications for engagement and communication strategies involved. Practical learning in Nepal could include disseminating post-earthquake information materials countrywide or formalizing Government-development partner coordination structures for future crisis response. Lessons for global stakeholders could seek to improve urban disaster support or strengthen the interface between emergency and reconstruction or strive for greater flexibility on timeframes for post disaster recovery support funding and programs.

Previous catastrophic disasters drew heightened levels of public attention and have had major impacts on recovery policies and practices. The 2001 Gujarat and 2005 Pakistan earthquakes increased the credibility of 'owner driven' housing reconstruction approaches. The 2004 Indian Ocean tsunami highlighted the need for coordination and for integration of risk reduction measures in reconstruction, contributing to the acceleration of the Inter Agency Standing Committee (IASC) cluster system and the Hyogo Framework for Action. The 2010 earthquake in Haiti raised awareness of factors involved in urban disasters leading to significant efforts to build humanitarian capacity through training and tools. All of these cases tested the existing humanitarian system, provided evidence and experience of strengths and repeated shortcomings and generated pressure for fast-tracked change.

The Nepal earthquake was similarly a landmark disaster. It also presents an opportunity to evaluate the performance of response and recovery systems under extreme conditions. The Government, the humanitarian community and civil society can learn and help others to learn through the documentation and promotion of successes or 'best practices'. There is as much to learn from failures, rigorously and honestly identifying and analyzing risks, opportunities missed and areas to improve. However, investigating and communicating shortcomings constructively can be a fraught process and requires balance, humility and sensitivity.

Learning within the country may be undermined by frequent turnover of personnel in many roles. Learning in global systems has to overcome institutional agendas. In both cases, inertia is stronger than willingness to learn or change. The efforts required are usually underestimated and the expectations that learning will happen are usually overestimated.

Institutions are social constructs, institutionalization is about people

Institutionalization is necessarily concerned with legislation, policies, data, science, technology, curricula, resources and systems but institutionalization as a change and learning process is also about people.

Invaluable knowledge gained through experience is held by the people who have been involved in planning and implementing recovery, who have had to operate their respective systems at all levels, as decision makers, officials or technicians and gained direct insight into their vulnerabilities, strengths, problems and solutions. Changes in knowledge, attitudes and practices involve people, whether in Government departments, in businesses, organizations or communities. Effective strategies for learning require understanding of social structures, cultural dynamics and communication as much as technical knowledge.

Key institutionalization questions to ask therefore are about people:

- ***Who has been involved in the Nepal recovery and gained knowledge, skills or experience?***
- ***What are those people going to do after recovery and how might they retain or use what they learned, individually or collectively?***
- ***Who will be involved in risk reduction or future disasters and how might they access learning?***
- ***How might learning happen?***
- ***What barriers or opportunities are there and what mechanisms are in place or could be developed to enable the people involved to consolidate, reflect on or transfer learning, or for others to retrieve, reuse, discuss, question and adapt learning?***
- ***What do individuals and organizations want to learn from the Nepal earthquake recovery?***
- ***Why do individuals and organizations want to learn, what are their objectives and motivations?***

The long-term development of institutions, including the evolution of the NDRRMA, is politically complex and outside the control of many stakeholders currently involved in recovery. The development and sustainability of current human resource capacity on the other hand would involve manageable steps which could be taken in the short term and yield tangible results. Sustainability could be set as an objective, with increased levels of awareness, improved knowledge and changed attitudes measured as indicators. Capacity could be a program output, apart from reconstructed buildings.

Some personnel are employed in roles which will continue, including in local Government. Some are employed in time-bound authorities or positions and uncertain of their futures. Many young personnel are at the start of their professional careers and have gained unique experience which will be of value to the country for several decades. Whether they are involved in the construction or in the regulation of the built environment, building capacity may provide recurring returns on investment in the future and lasting impacts on the resilience of Nepal.

Individual and collective capacity for the future

The 2950 NRA engineers represent a major national resource of expertise and experience developed through their support provided to housing recovery. Although retaining personnel in remote areas has proven difficult and the numbers have been depleted, all have benefited from this historic opportunity. As engineers, they have gained unique exposure to working in remote areas, for Government and with communities, in training and awareness activities, assessed how thousands of buildings collapsed and were reconstructed, and had to think about the value of engineering knowledge and challenges to its application.

The deployment of this new corps was necessarily task-focused. Engineers were thinly spread over a vast area, with limited opportunities to regroup or share experiences. The emphasis on field level capacity was not supported by associated investment at district or national levels to support their continued professional development or to ensure their institutional transition into continuing or new roles. As reconstruction is completed, the engineers' workload may reduce. Clarity may emerge on new structures for local authorities and disaster management governance. New opportunities may then arise for the engineers to document their experience and engage in further learning. The Government may explore administrative options for how to redeploy the technical capacity including to reinforce local authorities on civil works and building code compliance, to promote risk reduction in other areas of the country or to support future disaster response and recovery.

District level reconstruction orientation and review workshop Dhankhuta municipality © Housing Recovery and Reconstruction Platform.

At the outset in 2016, this corps of engineers came together for orientation on the critical role they were about to play to support the affected population on behalf of the Government. Before they disperse to various futures, it is important to reinforce their collective experience and their professional and personal networks, to reflect on their potential to play future roles and to motivate them to sustain their interest in the agenda of building a better Nepal. The engineers have spent almost all of their time in field implementation with limited exposure to higher levels of recovery policy development and management. In future disasters, these young staff may be among those responsible for planning and implementation of recovery policies and support programs.

Integrating some of the corps in the completion and institutionalization phase in district and national level authorities may ensure that field experience is better documented; there is mutual learning between field and senior personnel and those future leaders can develop understanding of decision-making and management.

Development partners investing in human resources

Similar patterns are prevalent among development partners in Nepal after the earthquake, and globally after disasters. Large numbers of staff who are recruited for emergency response and to provide support for recovery are simply task-focused with many hired as service providers or consultants. For the organizations involved, building staff capacity is only a secondary objective if even a measured output. Project-based personnel are hired on short-term, insecure contracts, due in part to the short-term and phased nature of funding, although recovery programs could be anticipated at the outset to require multiyear planning and personnel. Local personnel are often directly affected by the disaster, and precarious employment provides meager assurance while they rebuild their lives and homes.

Individuals, at all levels and in various roles, can get valuable exposure and experience through working with NGOs and in some cases good terms and conditions. However, the majority will not be retained by organizations when project funding expires. They may or may not find opportunities in the future to use or transfer their expertise. The organizations are unlikely to invest in temporary personnel documenting their experiences or otherwise processing their learning or in the creation or promotion of rosters of personnel profiles for future deployment. When key people are lost, considerable amounts of data, learning and institutional memories are lost, along with the potential to inform and influence change processes within organizations and the wider humanitarian system.

The current model of 'partnership' between INGOs and national NGOs may often be more accurately described as sub-contracting or transactional rather than collaboration between development professionals. Local NGOs and CBOs miss out on opportunities to build their own technical, operational and administrative capacity, which will be needed in the event of future disasters and which could contribute to long-term promotion of risk reduction. Governments, donors and INGOs all have parts to play in ensuring partnership delivers increased local and sustainable capacity and institutionalizes learning.

CONCLUSION

The Government of Nepal and development partners who were involved in recovery after the earthquake are now planning initiatives to document and communicate lessons learned and measures to institutionalise learning in their respective systems.

They should adopt useful advice from successful cases elsewhere and heed warnings from many failures. They should not underestimate the difficulties involved and the amount of time, effort and resources needed to achieve lasting outcomes. Optimism is vital but has to be measured. Other priorities will soon politically supercede earthquake resilience.

Leadership is needed for institutionalization, but leaders alone cannot deliver learning and change. Only the Government can transform Government bureaucratic attitudes and practices. The humanitarian community, likewise, have to look in their mirror and decide if and how they need to change, and then make it happen.

The earthquake affected over 6 million people's lives. Thousands have been involved in managing and implementing recovery over several years, all of whom have new knowledge, skills and experiences that can contribute to the resilience of the country.

Institutionalization might best be conceived as a process to facilitate those multiple stakeholders, in Government, in business, academia and communities to develop strategies to capture their new learning and for continued use of that learning. Breaking down what seems like an overwhelming aspiration into specific interest groups, defined activities and commitments, and timelines that can start now, can make institutionalization practical and achievable as a shared responsibility and a joint undertaking.

NRA engineers have unprecedented field knowledge of the housing sector from their recovery experience, Myagdi, March 2018.
© Housing Recovery and Reconstruction Platform.

4 TECHNICAL ASSISTANCE

Technical assistance involves training, demonstrating, advising and problem solving. © Habitat for Humanity Nepal.

Large-scale technical assistance needs joined-up planning, not just a collection of projects.

Over 800,000 households faced the task of reconstructing or rehabilitating their homes after the 2015 earthquake. They needed resources; materials, skilled labor and money. They also needed access to timely and appropriate technical advice, so they could make informed decisions, understand policies and support available, avoid reinstating vulnerabilities and instead incorporate risk reduction and other improvement measures for the long term futures of their families.

The need for technical assistance (or socio-technical assistance) strategies was identified shortly after the earthquake, including reviewing and preparing construction standards, training construction workers, disseminating public information and mobilizing communities. Technical assistance was considered critical to meet policy objectives to 'build back better' and an estimated US$ 150 million[10] was invested in a variety of initiatives by development partners.

With a large number of diverse stakeholders involved, from UN agencies to diaspora groups, documentation of the technical assistance provided is piecemeal, with no detailed collective evaluation of whether or not assistance was appropriate, timely and reached everyone. Without such an overview it is difficult to analyze how the aims might have been better met or the resources better used. Technical assistance for housing recovery after the earthquake in Nepal presented massive challenges. The results fell short of aspirations and expectations. There were gaps in terms of geography and in terms of scope. Some assistance arrived too late, some finished too early. Some areas received comprehensive support, other areas were neglected. Many of the deficiencies may be explained by the absence of joined-up planning for technical assistance and institutional mechanisms to guide policies and implementation.

The humanitarian principle of protection assures the right of all of the population to appropriate advice for their own safety and that of their families and communities. Advice needs to be accessible for those undertaking recovery and those who may be at risk in future crises. State authorities and development partners are responsible for upholding the right to information for all as a matter of public interest. As global disaster losses and rehabilitation needs become larger, and as Government and assistance capacities and resources become more stretched, technical assistance activities will need to be more effectively planned and implemented at large scale. Development partners will need to act with greater predictability, coherence and efficiency assisting Governments and communities to achieve more equitable and comprehensive outcomes.

Stone masonry house Bhojpur municipality. House completed September 2018. © Housing Recovery and Reconstruction Platform.

10 https://www.hrrpnepal.org/uploads/media/HRRPtimelinebooklet-April2019_20190425195635.pdf -

What happened in Nepal and what can be learned?

Defining and developing technical assistance in the owner driven approach

In the PDNA issued in June 2015, the Government of Nepal outlined an owner-driven approach to housing reconstruction and rehabilitation based on parallel inputs of financial and technical assistance to households and communities. The Government committed to provide financial assistance to all eligible households and to carry out regulatory technical assistance roles including building inspection. Development partners were requested to deliver other technical assistance activities, particularly in social mobilization and training construction workers, optimizing their advantages of speed, flexibility and presence in communities.

The subsequent PDRF in June 2016 reiterated the division of roles;

1) Government- financial assistance and regulatory technical assistance, and
2) Development partners - community based technical assistance.

While overall plans for financial assistance and regulatory activities were detailed with associated targets and budgets, which were revised over time, there were no agreed plans, targets or budgets for overall technical assistance, at the outset or subsequently. However, the absence of an agreed and communicated plan does not mean there were no efforts to plan for overall technical assistance.

Coordinating development partners

At the beginning of May 2015 a technical assistance and training technical working group (TWG) was established under the IASC Shelter Cluster, meeting at the National Society for Earthquake Technology-Nepal (NSET). The TWG developed a common framework for masons training for immediate use, and an outline framework for longer-term technical assistance including defining staffing and activities, phases and areas. The continued development, communication and adoption of a joined-up planning approach was hindered by changes and gaps in NGO coordination and personnel. Leadership on coordinating technical assistance shifted from IFRC, to UN Habitat, IOM, CRS and NSET[11]. The initial TWG was disbanded in July 2015 anticipating a transition to a Recovery and Reconstruction Working Group, which was delayed, and a further transition to the Housing Recovery and Reconstruction Platform from 2016 onwards.

A Shelter Cluster survey in August 2015 identified 61 responding agencies with combined US$ 200 million in funding to support housing and community reconstruction. In September 2015 a discussion paper was shared advocating standardization and estimating a budget of US$ 52 million required to provide full coverage of minimal technical assistance in the 14 most affected districts for an initial three years (based on 500,000 households). This was theoretically affordable, considering the total resources available at the time. Further efforts were made by key development partners to promote collective planning for technical assistance, but with limited traction from the wider group, they drew back and focused their attention on direct implementation in their own project areas.

Flux in development partner coordination was mirrored by flux in Government coordination, affected by transitions between designated authorities and multiple changes in personnel. While Government and non-Government coordination and leadership stabilized later, key opportunities were missed to operationalize technical assistance strategies and to guide planning for the resources available or to mobilize additional resources. Early Government leadership was constrained by limited institutional capacity and their prioritization of intensive planning for financial assistance including damage assessment, enrolment of households and agreements with financial service providers. The deployment of new Government engineers across initially 14 and subsequently 32 districts may be considered primarily as regulatory capacity to administer building inspection and facilitate access to financial assistance, but they also constitute the largest corps of technical assistance capacity and play vital advisory roles. The aim was to cover all affected communities although levels of assistance varied due to operational challenges. Initiatives to expand the Government's role in direct delivery of technical assistance including in areas without development partners and in the 18 moderately affected districts proved problematic.

11 Shelter Cluster and Housing Reconstruction and Recovery Platform secretariat lead agencies 2015-to date.

The majority of development partner resources were committed by the end of 2016 and could not be easily reallocated later. Shortcomings were already apparent in the coverage of technical assistance, including;

1) concentrations of resources in some districts,
2) insufficient resources and expertise for urban areas
3) the absence of support in the 18 moderately affected districts.

Commitments were largely fixed even before the detailed damage assessment was completed and without provision to respond to evolving situations which characterise housing recovery. Technical assistance was composed of a collection of projects without an overall plan, and a collection of actors without adequate institutional structures to collaborate effectively.

A number of development partners made significant contributions to policies and programming, for example through research on construction standards, analysis of displacement and factors in landlessness, and through the documentation and sharing of methodologies and learning from their own implementation of community based technical assistance. The Shelter Cluster and Housing Reconstruction and Recovery Platform partner coordination mechanisms facilitated information sharing and reporting, an interface with Government at national and local levels, and progress on content, such as curricula and guidance. However, they had limited mandate or means to resolve the key challenge of coverage of technical assistance, such as pooling or reallocating resources.

At peak in 2017, only 4% of affected communities in the 14 most affected districts had access to the NRA and HRRP-defined core technical assistance services by development partners. 72% had only partial assistance and 24% had none[12].

Options to achieve greater coverage of technical assistance were also constrained by 23 organizations deciding to substitute or duplicate the Government financial assistance to over 20,000 households, at a direct cost of over 60 million USD in grants apart from considerable operating costs, and 13 organizations directly building almost 1600 houses at a cost of over US$ 5 million.

Quality assurance and basic skills are critical for safer reconstruction. © Habitat for Humanity Nepal.

Initiatives by the HRRP to track resources focused on compiling data on activity or input costs, such as the cost per person of training, or per household of door to door advice. After eligibility for financial assistance expanded to the 18 less affected districts, the HRRP estimated US$ 75 million would be needed to cover technical assistance needs in the 18 districts and remaining gaps in the 14 districts. Detailed data on the overall budgets actually used for technical assistance is not available, nor is there data on budgets per districts or per year. Proxy data on agency activities indicates that activities (and funding) levels fell significantly by the end of 2017 although the majority of households were not constructing above plinth level until 2018 onwards.

Coverage and scope of technical assistance

Coverage of technical assistance across all affected districts depended on the mobilization and deployment of sufficient funds but also depended on the successful mobilization and deployment of sufficient human resources. Development partners cited the following capacity constraints as challenges in Nepal;

1) local organizations scaling up rapidly with associated stresses on their management and administration;
2) restrictions on visas for international personnel;
3) competitive procurement mechanisms resulting in the exclusion of the participation of losing bidders;

12 https://www.hrrpnepal.org/uploads/media/HRRPtimelinebooklet-April2019_20190425195635.pdf
https://www.hrrpnepal.org/uploads/media/OclYHCxvpw142eU8S905_2017_04_25.pdf

Reaching all households constructing at the same time with advice is challenging across a vast area and remote terrain, Myagdi, March 2018.

4) the amount of time staff spent repeatedly preparing proposals for projects and extensions;

5) short-term and insecure contracts affecting recruitment and retention of personnel and

6) limited mobilization of organizations with expertise in social inclusion, livelihoods and communications.

Opportunities were missed for researchers to inform policies, for experienced personnel to guide new organizations and younger staff and for a wider range of organizations and expertise to inform programming for example on social inclusion, livelihoods and communications.

Technical assistance activities were categorised and reported by the HRRP and the relationship between technical assistance and compliance with building standards has been documented. However, further analysis is needed on the scope, quality and appropriateness of technical assistance at policy and advocacy level and at field implementation level and the impact of technical assistance on reconstruction choices. The earthquake affected a vast area and range of contexts, including new and historic towns, mountains and valleys, remote and accessible locations with diverse traditions. Housing was not homogenous before the earthquake, reconstruction needs were not homogenous.

Issues include:

1) rehabilitation;

2) retrofitting and reuse of damaged or vulnerable buildings;

3) conservation and regeneration of culturally significant housing and settlements;

4) urban housing typologies;

5) multi-hazard mitigation measures and
6) options to improve building performance and sustainability including energy efficiency, sanitation and household water management.

The following guiding questions may provide learning to inform future policies and implementation:

- ***What total resources were used to provide technical assistance across all districts from 2015 to date?***
- ***What coverage of technical assistance was achieved with those resources?***
- ***What level of resources was required to achieve full coverage of technical assistance?***
- ***How might the available resources have been better deployed?***
- ***What barriers mitigated the optimization of resources?***
- ***Did people have appropriate options and technical assistance to rehabilitate or rebuild their homes according to their needs, priorities and preferences?***
- ***Was technical assistance primarily concerned that households accessed the cash grant and built one safe room, or more broadly concerned with improving housing outcomes?***

Are we learning from other disasters?

Over the last twenty years there have been significant improvements in the planning and implementation of financial assistance for emergency response and for housing reconstruction, building on extensive growth in cash transfer social protection programs and on progress in digital technologies and financial services. However, the development of large-scale financial assistance systems is not matched by a corresponding development of systems to plan and implement large-scale technical assistance.

Technical assistance for housing recovery has been insufficiently planned and resourced across many contexts. Examples include the responses after Cyclone Sidr in 2007 in Bangladesh, after Superstorm Sandy in the North East USA in 2012 and after Cyclone Idai in Southern Africa in 2019. Good technical assistance practices are rarely repeated, despite evidence of successes such as mobilizing local planning professionals to support urban housing recovery after the 2001 Gujarat earthquake or utilizing common evaluation tools to strengthen accountability after the 2004 tsunami in Aceh.

Planning has proven as critical as funding to determine success. After the 2005 Pakistan earthquake, strong planning and collaboration optimized very limited technical assistance resources and ensured coverage, consistency and successful recovery outcomes. Authorities and development partners tasked with planning technical assistance for housing recovery in new disaster situations, like Nepal in 2015, have access to aspirational policies but very little practical guidance. It is difficult to find details of how technical assistance was previously planned or implemented, successfully and unsuccessfully, after catastrophic disasters or recurring minor disasters, including institutional arrangements, coverage, cost, staffing or timing of technical assistance.

Without more comprehensive documentation and analysis of technical assistance implementation, learning is inadequate, the transfer of experience is limited and there is negligible institutional change to address the need for better planned, funded and implemented technical assistance.

The description of technical assistance in post disaster

needs assessments and recovery programs is often limited to training masons and community meetings. The narrow scope is mirrored by small budgets, insufficient to address, for example the training needs of engineers, building inspectors, material producers, social mobilizers, journalists and information managers in housing recovery or effective mass communication strategies.

Technical assistance needs to be understood as complex and involving a wide range of activities and stakeholders. Without better understanding, technical assistance is unlikely to be better planned or resourced. The task of building better understanding through documentation, analysis and communication of actual, disaster recovery cases is critical. Current institutional guidance for housing recovery tends to focus on the role of the Government including regulatory and financial management. Current humanitarian guidance tends to focus on the role of NGOs in shelter response and on community level recovery implementation. There is no consolidated picture, articulating and guiding relationships between state and development partners and harnessing non-traditional actors including media and the private sector. Developing common understanding is essential to enable stakeholders to plan and work together in hectic recovery situations based on agreed principles and through articulation of respective roles and activities. Mechanisms for collaboration are essential to operationalize shared objectives and collective responsibility including joint budgeting to optimise resources and common systems to track progress and respond to needs.

Technical assistance planning for housing recovery is commonly limited to individual Government or development partner projects, without overall multi-year, multi-stakeholder, multi-activity plans from emergency to reconstruction for the overall affected population. Planning is piecemeal and funding is piecemeal. Without comprehensive budgeted plans, insufficient funds are mobilized for technical assistance. Without detailed plans, targets and indicators are poorly defined. Without clarity on actual resources there is limited tracking of costs or evaluations of value for money.

Ideally, there is clarity on budgets (amount, source, terms and conditions) for technical assistance from the outset. In practice, clarity on resources and associated planning emerges incrementally. Technical assistance is adaptable according to resources available and far more flexible than financial assistance or direct construction programs. Past cases show that technical assistance programs can be effective even with limited resources and can adjust in times of uncertainty or as resources become available. Past cases also show that large funding can be wasted, without consensus and collaboration. The degree of flexibility in the use of funds, coordination in identifying priorities, and strategic planning of efficient activities may be as critical as the amount of funding available.

If technical assistance for all is an aim to be met in future disasters, institutional and stakeholder questions arise around the mobilization and management of large scale capacity and resources:

- ***Will Governments be able to respond quickly and flexibly enough to cover both regulatory and advisory roles effectively, considering their administrative and operating procedures?***
- ***Will NGOs access sufficient private and/or Government/ institutional funding to provide large scale technical assistance and what risks and opportunities will arise due to funding conditions?***
- ***Will diverse NGOs act collectively to ensure geography, temporal and thematic coverage of technical assistance?***
- ***Will a number of international or national NGOs develop capacity and position themselves to lead NGO coordination in recovery, to provide specialised technical services or expand to implement large scale technical assistance programs?***
- ***Will funding policies and institutional arrangements facilitate increased participation in technical assistance by a diverse range of civil society and private sector stakeholders, including academia, media, and diaspora organizations?***
- ***How will planning for large scale technical assistance take into account issues including sovereignty, ownership and sustainability?.***

CONCLUSION

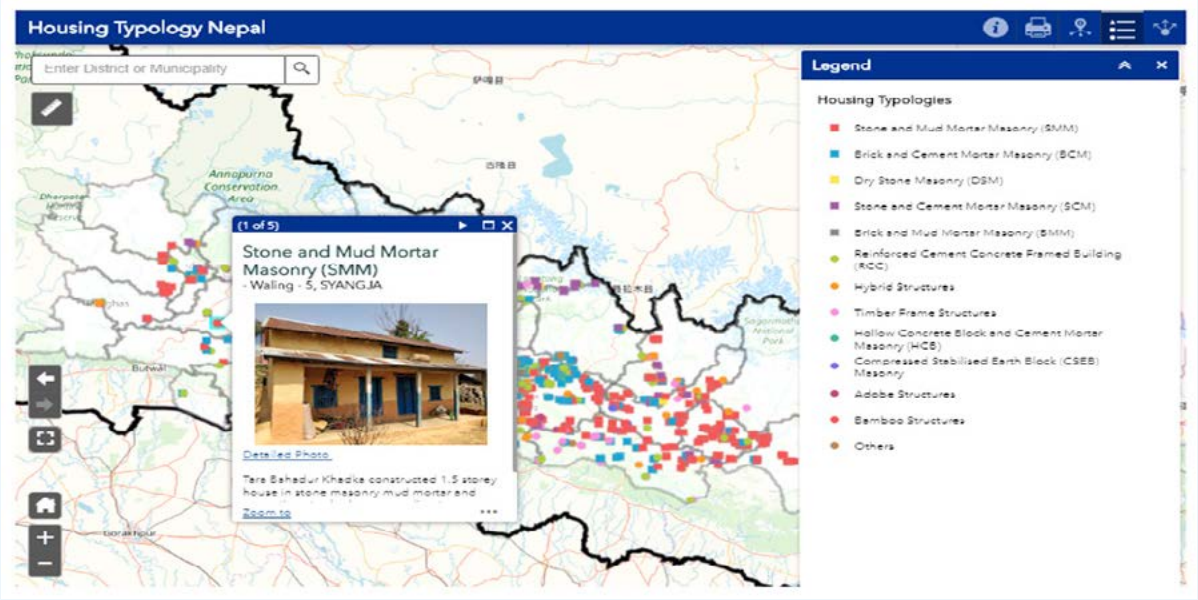
This document does not describe or analyze the numerous good initiatives in technical assistance for housing recovery in Nepal, already completed or still underway which are reported in greater detail elsewhere. Hopefully the successes will contribute to learning by organizations and authorities in Nepal and communication to peers in other countries facing housing recovery after future disasters. However, experience from previous recovery cases indicates that valuable knowledge is more usually lost and stakeholders need to invest proactively in communication and transfer of learning. It is equally, if not more, important that organizations diagnose and communicate serious systemic shortcomings, collectively if possible, with the aim to address those shortcomings. Accountability to affected populations demands such analyzes.

Despite warnings from previous disasters and despite the efforts of many involved in Nepal, there was no institutional arrangement or consolidated plan to ensure technical assistance for housing recovery for all affected communities after the 2015 earthquake. How that happened and the consequences need to be examined.

In the next large disaster questions will arise again about how to provide appropriate, timely technical assistance, across wide areas and potentially to millions of people reconstructing and rehabilitating their homes. The context will be different to Nepal in 2015, but similar challenges will arise including institutional flux and limited capacity and resources.

Development partners will need to have answers about how to better plan and implement technical assistance for all, and have means to calculate the human resources and funding required. They should in the meantime take stock of what they have learned in Nepal and from other experiences and how they are taking steps to ensure better outcomes in future.

The story of technical assistance in Nepal illustrates that insufficient planning is as important as insufficient funding in determining the outcome.



NRA and HRRP databases provided extensive data to monitor the progress of reconstruction and inform planning for technical assistance. © Housing Recovery and Reconstruction Platform.

FURTHER THEMES FOR LEARNING

This document is an initial exploration of four themes in housing recovery in Nepal, raising questions to consider for further documentation and analysis. There are many other themes and interrelated topics to explore in the Nepal earthquake case which could lead to learning about housing recovery in general and owner driven housing reconstruction strategies in particular. The following issues were raised by various stakeholders and warrant attention and discussion:

Time

Speed is the aspect of housing reconstruction most discussed in Nepal, more than the safety or cost, but 'fast' or 'slow' mean different things to different stakeholders according to their needs and expectations. 'Slow' or 'fast' reconstruction can only be adjudicated in relation or comparison to feasible time frames.
After all disasters Governments and development partners can determine the pace of public works with control over contracts and implementation but they cannot fully determine the pace of owner driven housing reconstruction, where decision-making, mobilizing the majority of resources and construction are the responsibility of households.
Delays in official policies, assistance and communication can significantly slow reconstruction progress, but efforts by authorities to accelerate reconstruction through issuing deadlines can be counterproductive with many households borrowing or building only to meet terms and conditions rather than their own needs and vulnerable households excluded from assistance. The result may be short-term political success in terms of numbers and schedules, but long-term failure in terms of unsatisfactory housing outcomes.
Development partners need to learn from Nepal about how long urban and rural housing reconstruction actually takes, the implications for recovery support programs and the reasons for and impacts of both delays and haste.

Culture

After most disasters cultural heritage recovery tends to focus on the plight of monuments, public and community structures. The plight of culturally significant private houses, collections of houses in villages, courtyards, urban blocks, private shops and workplaces, and associated cultural patterns of domestic and community life, along with traditional construction knowledge and skills receive less attention and often limited or no specific strategies in housing recovery policies and programs.
The Nepal earthquake destroyed and damaged cultural housing assets, but whether or not housing recovery represents cultural continuity, regeneration, adaptation or further loss depends on factors including policies and regulations, support and guidance, and critically the capacities, needs and priorities of households, communities and society.

Information

Recovery has been described as fuelled by two resources: finance and information. (Johnson and Olshansky 2017).[1]
Information and communication includes flows in both directions between national and local authorities, between Government and development partners, media, affected communities and the wider population.
Communication after the Nepal earthquake faced operational challenges across remote terrain and political challenges through changes of Government and a fragmented assistance sector.

13 Johnson, L.A. & R.B. Olshansky (2017) After Great Disasters. An in-depth analysis of how six countries managed community recovery. Lincoln Institute of Land Policy, Cambridge, Mass.
https://www.lincolninst.edu/sites/default/files/pubfiles/after-great-disasters-full_0.pdf

Rebuilding a home is particularly challenging for elderly residents. Sertung, Dhading, 2017. © Housing Recovery and Reconstruction Platform, National Society for Earthquake Technology, Nepal.

Vulnerability

Decades of recovery research shows that some households and groups struggle or fail to rebuild after disasters. One-size-fits-all owner driven housing reconstruction programs can facilitate large scale recovery but they are relatively blunt instruments which may reinstate pre-disaster inequities or vulnerabilities. Improving owner driven approaches requires learning about who struggled to recover or was disadvantaged by recovery policies and programs.

Individuals and groups are variously described as 'vulnerable', 'left out', 'left behind', 'excluded', 'marginalised'. Vulnerable cases in housing terms may be defined by their poor housing status or inability to rebuild, although many may have rebuilt through indebtedness and negative coping strategies.

Investigating whether and how vulnerable households and groups were anticipated, tracked, categorised, selected or supported at the outset, during recovery or after the majority had reconstructed their homes can provide lessons from Nepal.

Change

Documentation and learning about housing recovery tends to focus on reconstruction and directly evaluating policies and programs. Other changes are also likely to be happening at the same time driven by the housing, settlements and livelihood choices of earthquake-affected families, including changes in household size and structures, migration from rural to urban areas and accelerated sale and development of land. Unless we analyze these patterns of change we will not understand the experiences of disaster affected households and communities and major factors in their individual and collective housing recovery pathways.

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Note on the Author

Maggie Stephenson was seconded by Habitat for Humanity as recovery advisor in the Shelter Cluster Nepal in 2015. She worked for the World Bank assisting the NRA development of housing recovery policies and programs in 2016. In 2019 she returned to Nepal with Habitat for Humanity to support learning initiatives on housing recovery.

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