




# NEPAL EARTHQUAKE HOUSING RECONSTRUCTION MULTI-DONOR TRUST FUND



# ANNUAL REPORT

July 2019 - June 2020

 Schweizerische Eidgenossenschaft  
Confédération suisse  
Confederazione Svizzera  
Confederaziun svizra

Swiss Agency for Development  
and Cooperation SDC

 Canada

  
UKaid  
from the British people

 USAID  
FROM THE AMERICAN PEOPLE

Administered by:  
 THE WORLD BANK  
IBRD • IDA | WORLD BANK GROUP

World Bank Kathmandu Office  
Yak and Yeti Hotel Complex  
Durbar Marg  
Kathmandu, Nepal  
Telephone: +977 1 4236000  
+977 1 4226792

Faris H. Hadad - Zervos  
Country Director  
Maldives, Nepal and Sri Lanka  
Email: fhadadzervose@worldbank.org

Kamran Akbar  
Senior Disaster Risk Management Specialist  
Email: kakbar1@worldbank.org

Photos by:  
The World Bank, National Reconstruction Authority, Rajendra Malla

All documents available on:  
[www.nepalhousingreconstruction.org](http://www.nepalhousingreconstruction.org)

Copyright © 2021  
The International Bank for Reconstruction  
and Development /  
The World Bank Group  
1818 H Street, NW  
Washington, DC 20433, USA

All rights reserved  
The findings, interpretations, and conclusions expressed in this report are entirely those of the authors and should not be attributed in any manner to the World Bank, or its affiliated organizations, or to members of its board or executive directors or the countries they represent. The World Bank does not guarantee the accuracy of the data included in this publication and accepts no responsibility whatsoever for any consequence of their use. The boundaries, colors, denominations, and other information shown on any map in this volume do not imply on the part of the World Bank Group any judgment on the legal status of any territory or the endorsement or acceptance of such boundaries.

© World Bank Photo Collection

## Table of Contents

---

Abbreviations .....	1
Foreword .....	2
A Statement by the National Reconstruction Authority .....	3
<b>An Overview of the MDTF .....</b>	<b>4</b>
■ The MDTF's Value Add .....	4
■ Financial Overview of the Multi-Donor Trust Fund .....	7
<b>Progress of the Housing Reconstruction Program .....</b>	<b>10</b>
■ Overall Housing Reconstruction/IDA supported EHRP .....	11
■ MDTF supported EHRP .....	12
■ Performance Against Indicators .....	14
<b>Additional TA support from MDTF as Recipient Executed Grant .....</b>	<b>15</b>
■ NRA Component .....	16
■ NDRRMA Component > Scale-up .....	16
<b>Housing Reconstruction: A Stimulus for Nepal's Economy .....</b>	<b>17</b>
<b>Leaving No One Behind .....</b>	<b>19</b>
■ Socio-technical Assistance Teams Mobilized Amidst COVID-19 Crisis .....	22
■ Making Homes Accessible to All .....	28
■ Inclusive Entrepreneurship .....	29
■ Going Beyond Brick and Mortar: Rebuilding Lives Through Entrepreneurship in Nepal .....	31
<b>Third-party Monitoring .....</b>	<b>33</b>
■ Key Observations, Good Practices and Lessons from DPDS .....	34
<b>Challenges and Way Forward .....</b>	<b>37</b>
■ COVID-19 Challenges .....	37
■ Expediting Socio-Technical Assistance .....	37
■ Livelihood and Economic Recovery .....	38
■ Urban Reconstruction:Housing Finance Market Assessment .....	38
■ Building Long-term Disaster Management Capacity .....	38
■ International Conference on Nepal's Reconstruction (ICNR) .....	39

## Abbreviations

---

BDA	Building Design Authority	ILO	International Labour Organization
CAD	Canadian Dollar	IT	Information Technology
CBS	Central Bureau of Statistics	LGI	Local Government Integration
CEO	Chief Executive Officer	MDTF	Multi-Donor Trust Fund
CLPIU	Central Level Program Implementation Unit	MIS	Management Information System
DCC	District Coordination Committee	MOF	Ministry of Finance
DLPIU	District Level Program Implementation Unit	NDRRMA	National Disaster Risk Reduction and Management Authority
DPDS	Development Project Design and Services	NGO	Nongovernmental Organization
DRRM	Disaster Risk Reduction and Management	NRA	National Reconstruction Authority
EHDC	Earthquake Household Damages and Characteristics Survey	PDNA	Post Disaster Needs Assessment
EHRP	Earthquake Housing Reconstruction Project	PDRF	Post Disaster Recovery Framework
FCDO	Foreign, Commonwealth & Development Office	RE	Recipient Executed
GBV	Gender Based Violence	SDC	Swiss Agency for Development and Cooperation
GDP	Gross Domestic Product	STA	Socio-Technical Assistance
GESI	Gender Equality and Social Inclusion	SWN	Scott Wilson Nepal
GON	Government of Nepal	TPMA	Third-Party Monitoring Agency
HRP	Housing Reconstruction Program	UNOPS	United Nations Office for Project Services
ICNR	International Conference on Nepal's Reconstruction	USAID	United States Agency for International Development



## Foreword

---

Five years after the 2015 earthquake, the Government of Nepal's multisector recovery and reconstruction effort is nearing completion. Despite a series of challenges, most notably, the COVID-19 pandemic that shook the whole world, Nepalis have demonstrated incredible strength and agility in facing them. The National Reconstruction Authority (NRA) also proactively issued COVID-19 safety protocols to ensure that the reconstruction effort could resume at the local level with the highest priority.

One of the key pillars of the reconstruction effort has been the owner-driven housing reconstruction program (HRP) that aims to rebuild more than 800,000 houses to earthquake-resistant standards with continuous socio-technical facilitation. The pace and progress of reconstruction for this fiscal year is commendable with 92 percent of beneficiaries moving ahead in the reconstruction of resilient homes. The reconstruction of homes supported through the direct Multi-Donor Trust Fund (MDTF) grant is now complete, and 33 percent of these are women-headed households.

This year, the focus on ensuring that the reconstruction effort leaves no one behind was sharpened. With proper COVID-19 safety protocols, socio-technical assistance (STA) programs that prioritize support for vulnerable groups including women, the elderly, children, and persons with disabilities gathered momentum. This multi-pronged effort consisting of social mobilization, technical assistance and training, and focused support for the most vulnerable people helped accelerate housing reconstruction among these beneficiaries.

As one of the largest post-disaster HRPs in Nepal's history nears the finish line, the next step is to take the valuable lessons of this successful reconstruction program and apply them toward building long-term resilience from disasters, including climate-induced ones. To facilitate this transition from resilient reconstruction to building resilience, MDTF partners and the World Bank are supporting the development of institutional and technical capacity of provincial and municipal governments and the National Disaster Risk Reduction and Management Authority (NDRRMA).

With the contributions from the governments of Canada, Switzerland, United Kingdom, and United States, the World Bank-administered MDTF is providing crucial support to the HRP by providing just-in-time technical assistance and enhanced hands-on implementation support, and facilitating institutionalization of good practices and the lessons learned.

The World Bank Group remains committed to this coalition of major development partners that is pooling resources to help the communities most affected by the earthquakes, ensuring that no one is left behind in reconstruction, and build long-term disaster resilience in Nepal.

### Faris Hadad-Zervos

COUNTRY DIRECTOR,  
MALDIVES, NEPAL AND SRI LANKA,  
THE WORLD BANK



Government of Nepal  
**National Reconstruction Authority**

Singhadurbar, Kathmandu  
Phone: 01-4200601

---

**A Statement by the National Reconstruction Authority**

In the fifth year of its establishment, the National Reconstruction Authority (NRA) can look back upon its achievements with a measure of pride. While contending with multiple challenges including political, geographic, budgetary and human resource, as well as a once-in-a-lifetime pandemic, we have achieved remarkable progress in reconstruction of houses and rehabilitation of families. Even amidst the unforeseen pandemic, 92% of beneficiaries have made progress in reconstruction of their houses through the owner-driven reconstruction model. Over these five years, the reconstruction effort has also aided in employment creation – with 250 million working days of employment generated, and helping the local construction sector, and thus the economy, flourish.

Working on the principle of building back better, these rebuilt homes are resilient. In addition, now, each and every household knows about resilient technology, which was a condition of receiving the housing grants. This makes us optimistic about the long-term disaster resilience of new construction in these areas.

In the past year, we have also focused on building the capacities of governments, from members of parliament to provincial assembly members and the district coordination committees – who collectively own this program and have contributed tremendously to its success. We have also prepared a bank of human capital: including almost 1,00,000 masons and 6,000 engineers – who have been trained in resilient technology will continue their work – contributing to resilience in the country.

We are now documenting the lessons of reconstruction – preparing a compendium of learning in six thematic areas, currently working on 58 scientific papers, as well as numerous open-ended papers. We plan to share this learning with the world through the International Conference on Nepal's Reconstruction (ICNR), which will be organized by the NRA before the end of its tenure.

The year has not been without its challenges. With the COVID-19 pandemic hitting the world, Nepal and the reconstruction effort have also been adversely impacted. While we responded flexibly to prepare and issue guidelines to resume reconstruction, the pandemic has pushed the NRA timeline, and we have had to extend the tenure of the NRA by a year – with a new closing date of December 2021. By then, we will have completed the remaining work of housing reconstruction, and handed the other remaining reconstruction works to concerned government agencies.

In its final year, NRA will be focused on completing reconstruction, as well as on transfer of the valuable knowledge gained during one of the largest reconstruction effort in the country's history. We have been working closely with the National Disaster Risk Reduction and Management Authority (NDRRMA), local governments and various line ministries in the process of handing over knowledge as part of our exit strategy.

What seemed like an impossible task at the outset has now proved itself possible, with stakeholders across the country and in the development partners working together. The NRA recognizes the importance of the continued technical and financial support provided by the development partners. The cooperative approach through which pooled technical and financial support has been received from the World Bank-managed MDTF for the Earthquake Housing Reconstruction Project (EHRP), with support from the governments of Canada, Switzerland (Swiss Agency for Development and Cooperation), United States (U.S. Agency for International Development) and United Kingdom (Foreign, Commonwealth and Development Office) has been crucial for the NRA to lay the complex groundwork for the ambitious housing reconstruction program.

Going forward, the NRA remains committed to further our collaboration with the development partners, with the shared goal of building a more resilient Nepal.

Thank you.

Sushil Gyewali  
Chief Executive Officer

---

"स्वच्छ र सक्षम निजामती प्रशासन: समृद्धि र सुशासन"

त : ४२००६०१,

फ्याक्स नं. ०१-४२११४७३,

website: www.nra.gov.np,

email: nraceo.secretariat@gmail.com

# An Overview of the MDTF

The World Bank-supported Earthquake Housing Reconstruction Project (EHRP) with total financing assistance of \$700 million (\$200 million original financing; and additional financings of \$300 million and \$200 million) is one of the largest contributors to the Housing Reconstruction Program (HRP) of the Government of Nepal (GoN).

This contribution is further scaled up through the World Bank-administered MDTF (\$34.45 million including \$15 million recipient-executed grant) that plays a pivotal role in supporting the implementation of EHRP that aims to rebuild earthquake-resistant core housing units for more than 800,000 eligible beneficiaries in the districts affected by the 2015 earthquake. The HRP adopted an owner-driven housing reconstruction approach that is premised on the homeowners constructing earthquake-resistant houses with housing grants and under continued socio-technical facilitation provided by the government and development partners. This approach aims at improving long-term resilience through a culture of safer and sustainable housing. Safer construction is ensured by providing the housing grants in three tranches, where the second and third tranches are contingent upon satisfactory compliance to construction guidelines approved by the National Reconstruction Authority (NRA). The MDTF support has been crucial in bridging capacity gaps, scaling up housing subsidies, and providing just-in-time technical assistance and advisory support to the NRA on a range of topics.

## ■ The MDTF's Value Add

- Harmonization among the development partners by pooling financial and technical resources to support the Government's umbrella program.
- A coordination platform for the development partners leading to complementarity within their individual post-earthquake assistance.
- Reducing transaction costs by working through a single and scalable funding facility.
- Quick mobilization of experts and services reducing administrative burden on NRA.
- Enhanced transparency and accountability under World Bank procedures, whereby the World Bank undertakes the due diligence checks on financial management of the MDTF executed by the GoN on behalf of contributing partners.
- Facilitation of Socio-technical Assistance (STA) by supporting development of curriculum for capacity building of social mobilizers and mobile masons.
- Promotion of disability inclusion through both World Bank-executed & recipient executed (RE) activities.

# MDTF: A comprehensive framework of support

---



Census of about a million households in the earthquake-affected areas to collect housing damage and socioeconomic information

---



Determination of program eligibility and enrollment of eligible beneficiaries based on the housing damage characteristics survey

---



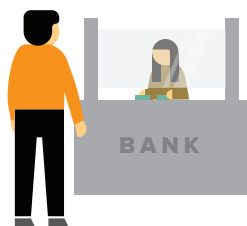
Social mobilization efforts tailored to reach the most vulnerable beneficiaries including women-headed households and persons with disabilities

---



Robust management information system (MIS) with a multi-tier grievance redressal system that has reviewed 100% registered grievances.

---



An accountable housing grant disbursement system with digital recordkeeping and direct payment of housing subsidy into the beneficiaries' designated bank accounts

---



Communication campaigns for safer construction practices and government approved design specifications

---



Mass awareness programs and trainings for masons and artisans

---



Direct housing subsidies and focused technical facilitation for 154,200 EHRP beneficiary households in eight target districts

---



Helped set-up house quality inspection regime to ensure earthquake-resistant construction at several construction stages with guidelines for corrective actions

---



Third-party monitoring for quality assurance of reconstruction

---



Strengthening of long-term disaster resilience by institutionalizing NRA's learning and records through a new government entity, the NDRRMA

---



## Financial Overview of the Multi-Donor Trust Fund



Table 1. Financial Contributions (as of June 2020; In millions)

MDTF Donor	Funds Pledged			Funds Received
	Country Currency	Amount [Country Currency]	Amount [\$]	Amount Paid [USD]
<b>USAID</b>	USD	9.60	9.60	9.60
<b>SDC</b>	CHF	7.00	7.29	7.21
<b>Canada</b>	CAD	14.70	11.61	11.59
<b>FCDO</b>	GBP	4.80	6.04	6.05
<b>Total</b>			<b>34.45</b>	<b>34.45</b>

The World Bank-administered Multi-Donor Trust Fund (MDTF) has helped channel the financial assistance from Nepal's development partners for housing reconstruction. To date, it has secured \$34.45 million in contributions from the Government of Canada; UK's Foreign, Commonwealth & Development Office (FCDO); Swiss Agency for Development and Cooperation (SDC); and United States Agency for International Development (USAID).

The MDTF-financed foundational activities for the design and implementation of the GoN's HRP in general with a specific focus on the World Bank-supported EHRP that covers 320,428 beneficiary households in districts most affected by the earthquake.

Among the range of activities supported by the MDTF, a \$10 million RE grant was disbursed to provide housing subsidies to approximately 3,200 targeted beneficiary households. Activities under this component of MDTF support were completed in FY2020. At the final tally, 3,766 households were provided with housing subsidies with MDTF support. Additional beneficiaries could be covered under the RE grant due to exchange rate gains.

In addition to co-financing the World Bank's Earthquake Housing Reconstruction Project (EHRP), the MDTF also provides the technical assistance to the entire housing reconstruction program led by the Government of Nepal.

Funds have been allocated to conduct damage assessment and beneficiary registration covering all affected districts, provide technical and advisory support to NRA for program management and implementation support, deploy third-party monitoring agents for quality assurance, and strengthen communication and outreach to beneficiaries on safer housing reconstruction and related policy guidelines.

An additional USD 5 million RE grant is in the pipeline for the NRA and NDRRMA. Activities under this grant will contribute to long term disaster resilience in the country through its support for most vulnerable populations in NRA's work as well as for institutionalization of long-term disaster response mechanisms through the NDRRMA.

Table 2: Fund Allocation

Activity	Allocated amount
Housing reconstruction grants (GoN Executed)	\$10.00 million
Earthquake Housing Damage and Characteristics Survey (EHDC) and beneficiary registration for the HRP	\$7.90 million
Implementation support	\$4.00 million
Communications and outreach	\$0.20 million
Third-Party Monitoring Agent Phase I (3 Districts)	\$1.00 million
Third-Party Monitoring Agents Phase II (8 districts except Kathmandu Valley Districts)	\$3.00 million
Strengthening Resilience	\$0.50 million
TA support to vulnerable on Housing Reconstruction (NRA)	\$3.00 million
Institutional Strengthening of National Disaster Risk Reduction and Management Authority and Disaster Resilience (NDRRMA)	\$2.00 million
Program administration and management	\$0.30 million
<b>Total</b>	<b>\$31.9 million</b>



# Progress of the Housing Reconstruction Program

The EHRP follows the four tenets of the Government's HRP derived from international experience and best practices of other HRPs: owner-driven construction, equity, safer construction, and transparency and accountability.

## There are five stages to HRP:

- Household-level damage survey
- Identification and validation of the beneficiaries
- Enrollment of the beneficiaries to HRP
- Housing grants in installments for reconstruction of the housing units
- Completion of the reconstruction

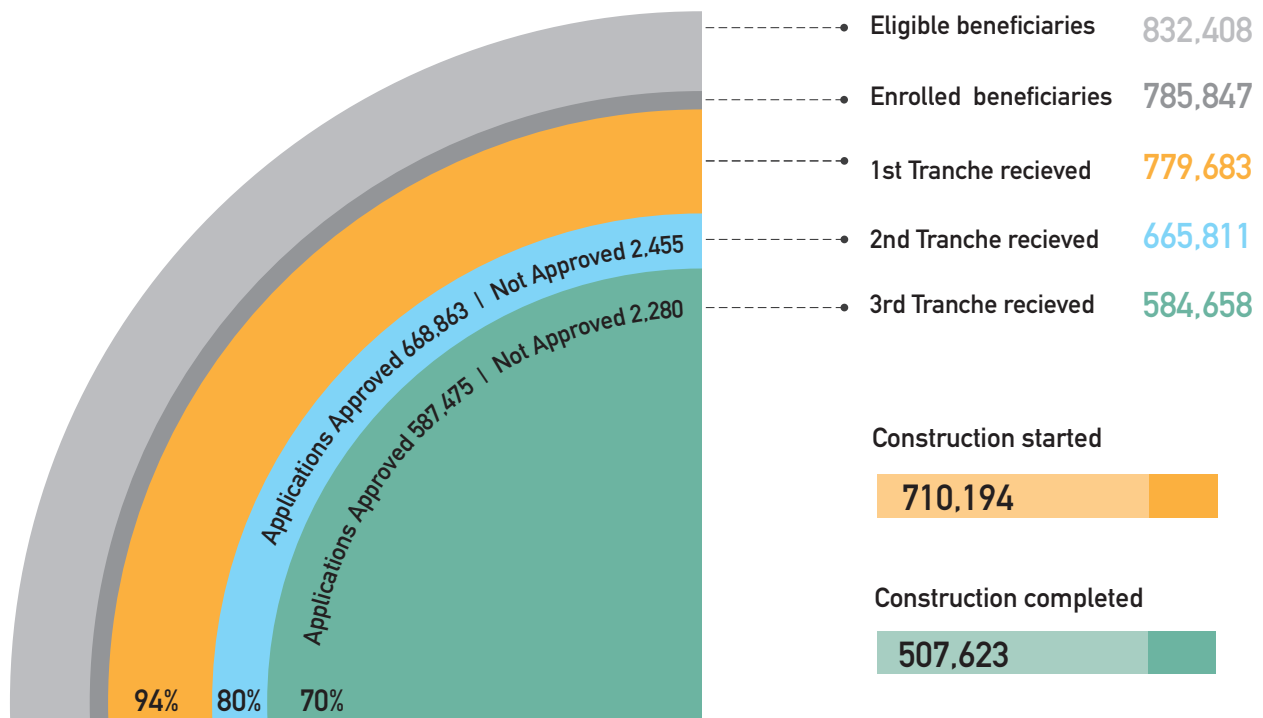
The first three have already been completed and the last two are underway.

## And the five stages are supported by five pillars:

- Technical assistance and support,
- Communication and Outreach,
- Grievance Redress System,
- Monitoring and Evaluation, and
- Management Information System



## Overall Housing Reconstruction/ IDA supported EHRP



Out of 832,408 beneficiaries of 32 earthquake-affected districts, 94 percent have already received the first instalment while 80 percent have received the second and 70 percent have received the third instalment.

Under the World Bank-financed EHRP and as part of the initial set of activities contributing to enhancing Nepal's ability to improve long-term disaster resilience, over 12,500 officials, engineering staff, social mobilizers, masons, and others have been trained in multi-hazard reconstruction, inspections of multi-hazard resistant construction, socio-technical assistance (STA), post-disaster surveys, grievance handling, and development and usage of customized mobile apps as well as reconstruction information system designing, development, & management.

Even while dealing with the unprecedented challenges posed by COVID-19, providing STA to beneficiary households gathered momentum this year, with the training of social mobilizers & field engineers. STA initiatives have already been noted by TPMAs as bringing about a positive effect on the quality, pace, and inclusiveness of reconstruction.





## ■ MDTF supported EHRP

With work on the housing reconstruction effort nearing the finish line, MDTF support will be focused on supporting the government in institutionalizing the learnings of one of the biggest disaster recovery projects and building long-term disaster resilience in Nepal using the systems, data, knowledge, lessons, and human resources that have played, and continue to play, a key role in the reconstruction effort.

### EHDC Survey and Beneficiary Registration

The EHDC survey and household registration process was coordinated by the GoN's Central Bureau of Statistics (CBS) and the NRA, with technical and logistical support from the United Nations Office of Project Services (UNOPS). This was a vital input to the entire reconstruction effort of the GoN. The survey was conducted in three phases, of which the survey in 14 most affected districts was financed through the MDTF grant. In 32 districts, the survey documented the earthquake damage information of 996,582 households and identified 832,408 potential program beneficiaries. The assessment classified a total of 1,052,930 houses into five categories, ranging from 'completely damaged' to 'negligible damage'. The process of registering the beneficiaries into the HRP was carried out using the EHDC information.

Table 4. World Bank Financing for the EHRP

	Funds committed (in millions)	Number of houses targeted to support	Actual number of houses supported as of June 30, 2020
IDA Credit 5706-NP	200	66,336	65,916
IDA Credit 6164-NP	300	119,148	112,265
IDA Credit 6530-NP	200	135,510	33,159
<b>Sub total</b>	<b>700</b>	<b>320,994</b>	<b>211,340</b>
MDTF Grant TF0A4783	10	3,200	3,766
<b>TOTAL</b>	<b>710.00</b>	<b>324,194.00</b>	<b>215,106.00</b>

### Housing Grants

The MDTF allocated \$10 million RE grant to co-finance the housing reconstruction component of the EHRP. This allocation was designed to provide housing grants to 3,200 households for rebuilding their houses with multi-hazard-resistant features in earthquake-affected districts. The World Bank and the GoN signed an agreement for this grant in September 2017 and the funds were transferred to the government's Designated Account on March 2018.

Following the same due diligence and output verification procedures in place for the EHRP, \$10 million allocated for the reimbursement of housing grants provided to 3,766 reconstructed houses completed and verified to be hazard resistant has now been spent.

Table 5. MDTF Housing Grant Beneficiaries

Districts	Female	Male	Third Gender
Dhading	195	331	
Dolakha	517	1,462	1
Kavrepalanchowk	159	260	
Nuwakot	201	230	
Okhaldhunga	29		
Ramechhap	109	201	
Rasuwa	41	26	
Sindhuli	4		
<b>Grand Total</b>	<b>1,255</b>	<b>2,510</b>	<b>1</b>
<b>Percentage of Total</b>	<b>33%</b>	<b>67%</b>	

## Technical Assistance and Implementation Support

---

The MDTF has allocated \$4 million to provide expanded implementation support and technical assistance to the NRA and provide socio-technical facilitation to homeowners. This support is channeled through individual consultants and firms. The assistance provided so far includes more than 20 individual and 3 consultant firms in the fields of communications and outreach, website development and maintenance, MIS, financial management, procurement, project operations, inspection regime, structural/earthquake engineering, livelihood enhancement, social mobilization, economic recovery, and disability inclusion.

## Management Information System

---

The EHDC survey has been instrumental in setting up the NRA's MIS, a crucial system for monitoring the physical and financial progress of the project. The MIS hosts and manages various elements of the HRP through the modules on survey, enrollment, payment, grievance, inspection, training, vulnerability, and resettlement. The MIS helps the NRA leadership in informed decision-making on the HRP and contributes to transparency and accountability among various stakeholders. A summary of the overall reconstruction progress update generated from the MIS is regularly published on the NRA website ([www.nra.gov.np](http://www.nra.gov.np)).

With the establishment of the NDRRMA, data from the MIS will be migrated to the NDRRMA as part of MDTF support for building long-term disaster management systems. Work has already been completed in restructuring the project to enable the MDTF to directly support the NDRRMA with a \$2 million RE grant for institutional development, which is currently awaiting final approval and was delayed due to COVID-19 challenges.

## Disability Inclusion, Disaster Resilience and TA on Urban Reconstruction

---

Moving ahead, an additional technical assistance grant is in the approval process. USD 3 million of this grant will be allocated to the NRA to make houses accessible for

persons with disabilities as well as persons with functional limitations. In addition to already identified persons with disabilities heading the households, if family members of other households are found with disabilities or functional limitations, their houses will also be made accessible. Further, persons with disabilities and functional limitations will be provided with assistive devices and livelihood enhancement support.

The reconstruction in the valley districts has remained slow because of multiple complexities, including land pooling and risk of damage to adjacent houses in case of demolition of destroyed structure. The cost of reconstruction in the valley is also higher than other areas, especially if adjacent houses are to be protected, and also, attention needs to be paid to restoring the cultural dimension of the valley houses. The technical assistance for housing reconstruction in Kathmandu valley districts will enable the NRA to prepare increasing momentum of reconstruction in the valley districts including reviewing housing finance market and recommending measures to improve them.

## Institutional Strengthening of NDRRMA and Disaster Resilience Technical Assistance

---

To enhance Nepal's ability to improve long-term disaster resilience, an RE grant of \$2 million for the NDRRMA will focus on institutional strengthening of this apex body for national disaster risk reduction and response coordination. Some of the activities that will be undertaken to strengthen the NDRRMA include establishing and strengthening communication and information technology (IT) systems, equipping select emergency operations centers, and strengthening the capacity of NDRRMA staff. The support to the NDRRMA will also focus on building disaster resilience at the national level. Assessment will be undertaken to build a multi-hazard disaster risk assessment platform to inform all 753 municipal governments, seven provincial governments, and relevant ministries and departments, together with the transfer of necessary information and records related to disasters to federal government ministries and departments as well as provincial and local governments. The NDRRMA will also build or strengthen capacities of provincial and municipal governments on disaster risk reduction and management (DRRM) as well as pandemics or emergencies.

## ■ Performance Against Indicators

The MDTF assistance plays a crucial role for World Bank-financed EHRP as well as for the GoN's umbrella HRP. Direct housing subsidies under the MDTF have benefited 3,766 households, reaching a total of 16,154 beneficiaries – higher than targeted. Focused technical

facilitation at the field level is ensuring that nobody gets left behind in the construction effort, and the technical assistance provided to the NRA on range of topics enhances the overall HRP management and implementation.

Indicators	Target	Actual	Status
<b>Component 1: Housing Reconstruction</b>			
Number of direct project beneficiaries	13,760	16,154	Exceeded
-percent female beneficiaries	50%	50%	Met
Percent of intended beneficiaries aware of project information and project investments	100%	100%	Met
Improved houses reconstructed under the project	3,200	3,766	Exceeded
Percent of registered grievances related to delivery of project benefits addressed	95%	100%	Exceeded
<b>Component-2, Disaster Risk Management Systems<sup>1</sup></b>			
Assessment of Housing Finance Market Conducted	1	0	New component, yet to begin
Emergency Operations Center Equipped	1	0	New component, yet to begin
Houses that belong to Persons with Disabilities and Persons with Functional Limitations made accessible.	100	0	New component, yet to begin
Number of Local Government Having Developed DRRM Plans	25	0	New component, yet to begin

<sup>1</sup> Component 2 is planned to be added to the MDTF after restructuring the project to include support for systems that enhance long term disaster risk management, as requested by the GoN.





## Additional TA support from MDTF as Recipient Executed Grant

---

The World Bank and MDTF partners have agreed to a request from the NRA, NDRRMA, and Ministry of Finance (MoF) for an additional \$5 million RE grant from the MDTF, which is in the pipeline. The grant is focused on complementing the STA implementation and enhancing resilience and DRM capacity building. \$3 million will be allocated to the NRA, which will use the funds to

complete physical reconstruction of houses and an initial set of short-term actions under the 'Local Government Integration' (LGI) component of the project; \$2 million will be allocated to the NDRRMA, which will undertake medium-to-long-term actions under the LGI, thereby enhancing Nepal's ability to improve long-term disaster resilience.

## ■ NRA Component

The NRA will be provided with a grant of \$3 million. Through the NRA, this component will finance technical assistance in multiple disciplines including, but not limited to, the following:

- Conducting trainings of masons on 'Making Homes Accessible to All' and providing material support to build accessible houses for EHRP beneficiaries with disabilities
- Providing technical assistance to earthquake-affected households that are lagging behind severely in reconstruction
- Supporting livelihoods enhancement for earthquake-affected households, especially the vulnerable
- Reviewing the housing finance market and exploration of possibilities to build capacities of beneficiaries to access housing finance
- Building capacity of local governments and NRA, Central Level Program Implementation Unit (CLPIU), and District Level Program Implementation Unit (DLPIU) officials as well as concerned District Coordination Committees (DCCs), for effective and efficient management of reconstruction

This grant will also provide adequate assistive devices to the EHRP beneficiaries with disabilities, where feasible.

All vulnerable beneficiaries who have faced challenges in completing the housing reconstruction need to be provided with additional help through training, provision of masons, or labor to complete the reconstruction. The EHRP MIS indicates that there are 11,820 vulnerable beneficiaries who are at different stages of reconstruction, 1,822 of whom have not even enrolled. These potential beneficiaries will be approached to assess reasons for their inability to start reconstruction and to provide them with assistance to commence/resume and complete reconstruction. If, because of cogent reasons, they are not able to enroll and/or start reconstruction, the NRA will remove them from its list of potential beneficiaries. The 3,217 beneficiaries who have received the third tranche will be facilitated to ensure they complete the output, that is, reconstruction up to roof level, if not already done.

## ■ NDRRMA Component > Scale-up

The NDRRMA component of the MDTF RE grant directly supports the Project Development Objective to enhance Nepal's ability to improve long-term disaster resilience. The NDRRMA will utilize its allocated \$2 million for the following:

- Developing a multi-hazard disaster risk assessment platform to inform all 753 municipal governments, seven provincial governments, and relevant ministries and departments for which it will undertake assessment in selected provinces and municipalities
- Strengthening capacity of provincial and municipal governments on DRRM as well as pandemics or emergencies
- Building capacities of provincial as well as local governments in accordance to its mandate, as enshrined in concerned legal frameworks
- Transferring necessary information and records related to disasters to federal government ministries and departments as well as provincial and local governments
- Carrying out NDRRMA institutionalization that includes (a) establishment of an information technology system, (b) equipping of select emergency operations centers, (c) communication and IT equipment, and (d) capacity strengthening of NDRRMA staff.

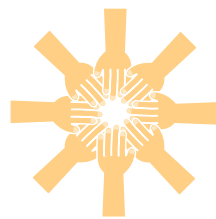




## Housing Reconstruction: A Stimulus for Nepal's Economy

To assess the economic activity generated because of reconstruction in Nepal, the EHRP conducted a survey through Scott Wilson Nepal Ltd (SWN), Building Design Authority (BDA), and DEVTEC Nepal Pvt. Ltd to assess and measure the extent of economic activities generated as a result of the Earthquake Housing Reconstruction Project in 11 of the most-affected districts. A total of 2,762 beneficiaries of the EHRP were selected at random for telephone interviews as in-person surveys could not be undertaken because of COVID-19.

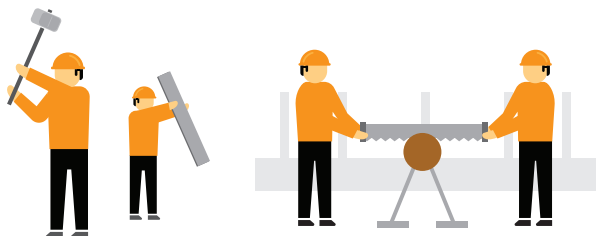
Building on the findings of the survey, the report estimated the economic activity that housing reconstruction generated between 2018 and 2020 and projected the likely figures for economic activity stimulated by housing reconstruction for the remainder of the project, that is, up to June 30, 2023.



From 2018-2020:

Housing Reconstruction activities stimulated economic activities of approximately USD 4.44 billion in construction sector, including:

176 million persons days employment created, aiding to livelihood support to the communities affected by earthquake.



### From 2020-2023:

Continued reconstruction activities till the end of the project is expected to contribute approximately USD 1.57 billion in construction sector, including:

58 million person days employment created, aiding to livelihood support to the communities affected by earthquake and COVID-19 pandemic.

It was estimated by the survey that reconstruction efforts resulted in creation of employment opportunities for both unskilled and skilled labor and demand for all types of construction materials. The study estimated the dollar value of this economic stimulus to be approximately **\$4.22 billion<sup>2</sup>** in the construction industry of Nepal during 2018–2020, a major injection into the economy.

In addition, the reconstruction activity is estimated to have created **176 million person days** of employment, at a time when people had lost their entire livelihoods, thus becoming a lifeline for people to rebuild not just their homes but also their lives.

The study also estimated the dollar value of the future economic stimulus and employment generation during 2020–2023, that is, from the time of the study until the end of reconstruction.

The latest International Labour Organization (ILO) data on the labor market impact of COVID-19 reveals that 1.6 billion<sup>3</sup> workers in the informal economy—that is, nearly half of the global workforce—stand in immediate danger of their livelihoods being destroyed. Without alternative income sources, these workers and their families will have no means to survive.

<sup>2</sup> This figure is the estimated economic value under the assumption of 68% complete houses and the 32% incomplete houses being at 75% degree of completion in the 11 survey districts – the employment figures are also generated under the same set of assumptions. For more detail on the projections based on a different set of assumptions – where incomplete houses are assumed to be at 50% completion, please see the report, “Housing Grant: A Stimulus for Nepal’s Economy.” The total monetized values do not represent World Bank funding or other grants provided to beneficiaries for reconstruction of houses but is the monetized value of the economic stimulus created by EHRP in Nepal.

On average, continued support to the reconstruction effort, when fully completed by 2023, is projected to generate approximately **\$1.57 billion<sup>4</sup>** in economic activity. Continued reconstruction in this period also has the potential to generate approximately **58 million person days** of employment for construction of 187,167 housing units, which can address, to some extent, the unemployment created by the COVID-19 pandemic.

The study notes that continuity of reconstruction to complete the housing reconstruction promises greater opportunities for employment generation with direct impact for livelihoods of the poorest. Faced with increasing poverty resulting from unemployment, governments around the world are incentivizing construction through relaxation in lockdowns. The study recommends other incentives in short to medium term, which may include:

- Prioritize pending projects;
- Extend timelines by 3 to 6 months as applicable;
- Reduce interest rates for construction loans through central bank intervention;
- Reduce gas / electricity charges if they cannot be waived off completely;
- Provide one-time government infusion of funds to reinvigorate the industry and its supply chains ;
- Increase efficiency in approvals and inspection through “one-window” operations at national and sub-national regulators.

Finally, the study also estimated the contribution of this upcoming reconstruction effort to the GDP of Nepal, and projected that in the fiscal year 2020-2021, economic stimulus as a result of the reconstruction effort could contribute as much as 1.78 % of the country’s GDP – which could itself be a great incentive to give continuity and momentum to the reconstruction effort.

<sup>3</sup> [https://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS\\_743036/lang-en/index.htm](https://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS_743036/lang-en/index.htm)

<sup>4</sup> During 2018 to 2020, a total of 422,299 houses were constructed in 11 most affected districts, thus on average 12,797 houses per district per year. This figure assumes future demand for reconstruction will fall, and only 25% additional housing units (3,200 units per district per year) will be required in 11 most affected districts during 2020-23; - and only half of what is being proposed for 11 most affected districts (i.e. 1,600) will be required in the 17 least affected districts.





## Leaving No One Behind

The NRA, with support from the MDTF, provided technical assistance to develop capacity building programs on social mobilization with the objective of facilitating NRA's effort to leave no one behind in the reconstruction. Focused on vulnerable groups including women, children, and persons with disabilities, this multipronged effort consisted of social mobilization, technical assistance, and training, as well as focused support for the most vulnerable.

STA teams facilitate acceleration of reconstruction activities by providing tailored support to those beneficiaries who either have not yet been able to start reconstruction or have abandoned the process midway because of various reasons including vulnerability.





### Tailored Support for the Most Vulnerable

- Single women
- Elder people of 75 and more
- Minor with no guardian
- Persons with disabilities holding red and blue card.



### At Their Doorsteps, Through

- 246 social mobilizers and
- 755 mobile masons

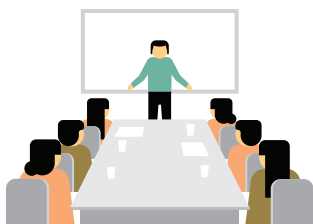


### Who work with NRA field engineers across the 14 most-affected districts, trained in various inclusion aspects:

- Concept of vulnerability
- Ways to identify vulnerable communities
- Concept of disability
- Factors involved in making homes accessible
- Gender equality and social inclusion (GESI)
- Gender-based violence (GBV)
- Process to access benefits.

# Making Reconstruction More Inclusive: A Snapshot

---



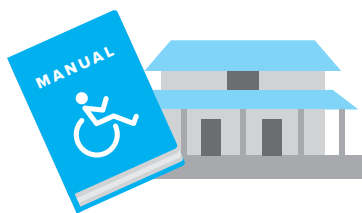
- Four-day interactive training for social mobilizers and field engineers provided

---



- Video training modules for mobile masons developed

---



- Mobile masons training manual on making homes accessible for persons with disabilities developed

---



- Pilot entrepreneurship training of trainers for persons with disabilities conducted

---



- Accessible houses built for beneficiaries with disabilities, and assistive devices and livelihood enhancement support extended

---



- Focused support to 11,820 identified vulnerable beneficiaries provided

---





## ■ Socio-technical Assistance Team Mobilized Amidst COVID-19 Crisis

In February 2020, the NRA recruited 246 social mobilizers, of which more than 60 percent are women, and 755 mobile masons, with women constituting 20 percent of the workforce. The STA teams' primary responsibility is to link non-responding beneficiaries with program activities as well as provide tailored support, especially to the vulnerable, to expedite the reconstruction. Mobile masons are supposed to physically participate in the reconstruction of the houses belonging to vulnerable beneficiaries in addition to providing construction-related technical support. The main role of social mobilizers is to mobilize the STA teams and communities and coordinate with local governments, civil society organizations, and other reconstruction stakeholders to plan and implement STA support to all reconstruction beneficiaries in general and the vulnerable beneficiaries in particular.

The main objective of STA is to ensure no one is left behind in reconstruction and recovery because of the following::

- Those who have not yet started reconstruction or have aborted the process midway (approximately 100,000 beneficiaries in 14 most-affected districts) include the most vulnerable.
- Some beneficiaries, because of their age-related inability, disability, illness, or any other functional limitations require physical support in reconstruction. For this group of people, mobilization of STA team/community is critical.
- For owner-driven housing reconstruction, the houseowner makes the decision with regard to reconstruction of the house including the typology. Assistance is key to understand the project basics and access technical input during reconstruction.

**STA is critical even though the NRA is in the process of concluding housing reconstruction because of the following:**

- To understand the reasons why some beneficiaries are not reconstructing their houses. This requires focused support to the extent possible so that such beneficiaries are integrated into the project activities. In case the beneficiary's decision to not construct is final, documenting reason(s) becomes important.
- To promote collective actions from STA teams, local governments, communities, and other stakeholders.
- To bridge the gap between eligible beneficiaries and existing support mechanism.
- To assist NRA, in expediting and concluding private housing reconstruction within the stipulated time.

**The broader Outcome of STA program is contributing towards building resilient communities by:**

- Persuading target beneficiaries to start/resume reconstruction.
- Reconstructing multi-hazard resistant houses as a result of focused STA.
- Promoting resilient construction technologies.
- Linking beneficiaries with recovery programs.
- Facilitating reconstruction of accessible homes for persons with disabilities.
- Facilitating reconstruction of houses of the most vulnerable beneficiaries.

STA teams consist of social mobilizers, mobile masons, and field engineers, who facilitate acceleration of reconstruction activities. Being local residents, these mobile teams often go door to door, providing beneficiaries with technical and social support that allows them to access reconstruction benefits. As trusted intermediaries, they also act as a bridge between beneficiaries and local authorities or inspecting engineers for core tasks that expedite the reconstruction process. These include facilitating beneficiaries to fill out paperwork, coordinating inspections, and distribution of completion certificates.

While adapting to COVID-19 challenges, social mobilizers and field engineers were trained on social mobilization to support the most vulnerable access housing benefits. These field personnel were trained on the reconstruction program, concepts of vulnerability, ways to identify vulnerable members or communities, understanding of gender equality, and making homes accessible to all—including persons with disabilities.



### Social Mobilizers

A four-day interactive social mobilization training was conducted for field engineers and social mobilizers in 10 of the 14 program districts. Altogether, 172 social mobilizers and 90 engineers participated, learning the concept of vulnerability, ways to identify vulnerable communities, and factors involved in making homes accessible. They also gained an understanding of GESI and GBV, as well as conflict management.

Due to challenges posed by COVID-19, the training could not be organized in the four remaining districts (Ramechhap, Sindhuli, Kavrepalanchowk, and Bhaktapur). For these districts, the training materials have been prepared as a package, ready for distribution to social mobilizers and others to ensure that they are able to incorporate this learning in their work.





## Mobile Masons

Training mobile masons is key to expediting reconstruction activities in the field. To fast-track reconstruction in the new COVID-19 scenario, a training module for mobile masons is planned to be developed in video form. Altogether, 10 videos are being developed covering legal, policies, technical, and social components related to reconstruction. The videos will address everything related to mobile mason training, including minimum technical requirements of buildings, repair and retrofit basics, quality control, and GESI aspects of reconstruction. Good-practice case studies from the field will also be incorporated in the videos.

A half-day orientation for DLPIU officials and one-day orientation for municipality focal persons and ward engineers who will deliver the training will be conducted. The focal persons and ward engineers will organize two-day municipality-level training using the videos developed, encouraging participants to raise field-based practical questions, and seek concrete solutions together.

As part of the additional MDTF grant, the CLPIU is also planning to organize trainings for mobile masons on 'Making Homes Accessible to All' manual. This training will be focused on helping mobile masons to conduct needs assessment, identify accessibility requirement of the beneficiary, and design and build homes that factor in the needs of persons with disabilities.

## Mobile Masons: A positive force in reconstruction

SCOTT WILSON NEPAL (SWN), THIRD-PARTY MONITORING AGENT

As part of the EHRP implementation, mobile masons and social mobilizers have been recruited in all project districts to support homeowners in reconstruction. This mobile team provides direct door-to-door support, mainly to fast-track private housing reconstruction while ensuring that no one is left behind. The team operates at the local level under the direct oversight of NRA engineers and sub-engineers.

In Hetauda sub-metropolitan city, there is one mobile mason in each ward and one social mobilizer covering two to three wards. Members of the mobile team are local residents often from the same municipality, if not the same ward, where they work.

During inspection visits and spot checks conducted by SWN, mobile masons supported the TPMA team to identify the location of beneficiaries, communicate with the beneficiaries during the COVID-19 pandemic, & provide information on the technical aspects of construction.

Mobile masons were found to be involved in construction works, assessing ongoing construction works within their mobilization area, and visiting ongoing construction at least once a week. Apart from these visits, they were also often approached by beneficiaries who encountered specific issues in construction. In the COVID-19 era, while Makwanpur district adopted strict lockdown measures, mobile masons were on the frontline, continuing their work, if needed, with safety measures.

SWN teams noted that the mobilization of masons has enabled the beneficiaries to receive technical and social support at their doorsteps regularly. They facilitate inspection of houses by recording inspection notes, notifying engineers for inspection, and assisting in distribution of the completion certificate.

These teams are local residents, so they quickly build rapport with the beneficiaries. Beneficiaries and construction workers were more likely to follow the instructions given by mobile masons. While mobile masons are well trained on the technical standards and construction practices of resilient shelters, with further training, they could also become integral to implementing corrective action on noncompliant homes.

# In Nepal's post-earthquake reconstruction, women masons are breaking gender barriers

“Mason training transformed my life. It provided me with an opportunity to not only gain new skills and experiences but also to serve my community,” recounts 38-year-old Kamala B. K. from Nuwakot in central Nepal.

Kamala is one of 149 women mobile masons hired by the NRA in 14 districts most affected by the earthquake for providing STA under the World Bank-supported EHRP.

Under the project, women mobile masons make up 20 percent of the total mobile masons recruited, which is an unprecedented feat considering that masonry, and the construction sector, have conventionally been male-dominated until recently.

However, according to Nepal's 15th Five Year Periodic Plan developed by the National Planning Commission, women's labor force participation stands at 26.3 percent which is slightly less than half of that of men at 53.8 percent.

Data from Nepal Engineering Council show that the percentage of women engineers who have received the license to work professionally at the national level is 12.5 percent, and the remaining 87.5 percent are men.

The gender gap is even higher in masonry and other construction subsectors such as carpentry, plumbing, electricians, among others. Sociocultural norms are the main reason why women are not easily accepted in male-dominated occupations including masonry.

But this stereotyping is gradually fading. According to the Global Gender Gap Report 2020, Nepal ranks 101 out of 153 countries in economic participation and opportunity, which is an improvement from previous such assessments.



*“Mason training transformed my life. It provided me with an opportunity to not only gain new skills and experiences but also to serve my community,”*

-Kamala B. K., Mobile Mason,  
NUWAKOT DISTRICT, NEPAL

# Increasing participation, changing mindsets:

Before the 2015 earthquake, apart from engineering, women's participation in the construction sector was limited to basic labor work. Post-earthquake reconstruction, including those under the EHRP, offered new avenues for women in occupations that were previously male-dominated.

The masons training opened new opportunities and immediately many of the women trainees, such as Kamala, took up masonry as a vocation.

Ganga Bhujel, a 21-year-old mobile mason from Okhaldhunga notices a change in behavior and perception from other people when regarding women working in the sector.

“When I started, there was a lot for me to learn in the field. However, homeowners encouraged me to continue working and assured me that with experience, I will also perfect the craft,” she shares.

Besides technical assistance, the mobile masons have additional responsibilities of linking communities and beneficiaries with the program and providing support such as house inspection and grievance redressal for the vulnerable households.

As many field engineers are not able to be present on the ground due to COVID-19-related restrictions, the locally based mobile masons have become even more sought-after experts in the villages.

“Villagers now consider us engineers as we are informing local people about resilient construction techniques,” exclaims Durga Bhatta, a mobile mason from Rasuwa.

By entering the non-conventional sector, women masons, such as Kamala, Ganga, and Durga, are breaking gender barriers while rebuilding homes and ensuring that no one is left behind in reconstruction. Communities and governments at all levels should work together to further empower and create an enabling environment for women to endure and evolve to their full potential in the construction sector.

*“When I started, there was a lot for me to learn in the field. However, homeowners encouraged me to continue working and assured me that with experience, I will also perfect the craft”*

-Ganga Bhujel, Mobile Mason,  
OKHALDHUNGA DISTRICT, NEPAL



*“Villagers now consider us engineers as we are informing local people about resilient construction techniques.”*

-Durga Bhatta, Mobile Mason,  
RASUWA DISTRICT, NEPAL



## Leveling the field for women masons:

---

To sustain this momentum and to ease the debilitating impacts of the COVID-19 economic downturn, opportunities must be expanded to retain women in the sector and enhance their skill sets as the local context and market demand significantly increases. Several types of skill enhancement programs can be introduced, as elaborated in the following paragraphs.

## Diversifying skill enhancement opportunities:

---

Most women masons in rural areas are skilled in 'stone with mud-mortar' techniques. However, there is a growing trend of homeowners opting for reinforced concrete (RCC) technique as their financial status improves. Similarly, there are alternative construction technologies introduced after the earthquake, which are being adopted by homeowners. Therefore, training women masons on these new technologies will enhance their skillset and keep them relevant beyond reconstruction. Likewise, educated women masons with entrepreneurial characteristics can be provided with entrepreneurship development training.

## Facilitating linkage to opportunities:

---

Trained masons, both men and women, are already working in close coordination with the concerned local levels. Employment service centers at each local level can facilitate links with employment opportunities or use their skills in other development programs. Such centers are also supported by the World Bank's Youth Employment and Transformation Initiative Project.

## Promoting construction driven micro enterprises:

---

Earthquake reconstruction also introduced a number of alternative technologies such as interlocking bricks, compressed stabilized earth bricks, and stone-cutting technology. The women masons can be mentored to be entrepreneurs and supported in accessing finance and markets to ensure long-term sustainability in the sector.







## ■ Making Homes Accessible to All

Achieving disability inclusion and empowerment demands innovative solutions for removing barriers to access, including the barriers in housing infrastructure, for the most vulnerable.

The ‘Making Homes Accessible to All’ training aims to equip masons in Nepal with the skills to build back better by equipping them with the skills to retrofit or reconstruct homes so that they are not only multi-hazard resistant but also accessible for persons with disabilities. The training will enable masons to assess specific needs of persons with disabilities/persons with functional limitations and incorporate accessibility elements in the houses so that they can perform their daily functions independently.

The manual development was financed through the World Bank-administered Nepal Earthquake Reconstruction MDTF in close coordination with the NRA and CLPIU-Building, which aims to introduce the concept of accessibility to masons at the front line of the reconstruction effort.

Nonstructural elements in the reconstruction of houses are important to ensure accessibility for persons with disabilities/persons with functional limitations.

By presenting barriers that persons with disabilities encounter while performing the simplest of daily functions, the manual delves into how a simple structural/nonstructural solution can assist them in overcoming those barriers. Practical solutions that fit the contextual realities of rural Nepal and availability of construction materials have been introduced, with the aim of promoting local practices and indigenous knowledge. Houses thus built will support persons with disabilities in overcoming environmental barriers.

A pilot training of trainers was delivered to 36 focal engineers, including 16 women engineers, from the NRA. Attendees reported that the training was instrumental in changing their mindsets as they had a limited understanding of disability/functional limitations and accessibility. The training was also able to clarify myths and misconceptions associated with building accessible homes such as ‘building accessible home is costly and too technical,’ ‘there are standard solutions’, and ‘accessibility is useful only for persons with disabilities’. Participants also appreciated the newfound understanding that, in addition to persons with disabilities, accessible construction also helps people with functional limitations and elderly and pregnant women perform daily functions more independently.



## Way forward

---

While the manual will guide the trainers, a mason handbook, which is also being developed, will guide the masons. The mason handbook is prepared with simple masonry language and pictorial depictions. The handbook starts with a checklist for needs assessment, which is expected to guide the masons in understanding the need of the clientele they serve and plan accessibility elements accordingly in the design of the house, in coordination with the owner/user. The training for mobile

masons will be hands-on, with them participating in the retrofitting/reconstruction of houses belonging to vulnerable beneficiaries with disabilities. The expectation is that the trained masons will continue using their skillset beyond reconstruction, thus contributing to build an inclusive and just society.

Social mobilizers will play a vital role of convincing households having a family member with disability to build accessible homes. An additional basic training on the concepts of disability and accessibility will be provided for social mobilizers.

# Inclusive Entrepreneurship

---

Along with reconstruction efforts, the Post Disaster Needs Assessment (PDNA) estimated damages to microenterprises and cottage and small industries at around NPR 15 billion. The Post Disaster Recovery Framework (PDRF) (2016–2020) underscored the urgency to restore economic opportunities and livelihoods. PDRF envisioned a financial outlay of over NPR 9 billion for special programs for livelihoods enhancement and employment generation, including business development. The proposed programs were in addition to employment and business development opportunities in other reconstruction projects.

One of the PDRF Reconstruction and Rehabilitation Policy objectives is “to develop new opportunities by revitalizing the productive sector for economic opportunities and livelihoods.” Restoring Employment and Livelihoods is one of the key elements of the said policy of the NRA. The PDRF’s approach in this regard is stated as, “Livelihoods in the earthquake-affected area will be supported by food for work or cash for work in the short term. In the medium term, cooperatives, savings and credit groups, and micro-finance institutions will be encouraged to assist cottage, small and micro-industries. Skills training and entrepreneurship will be facilitated as well.”





The policy emphasizes the need for income generation and livelihood support for earthquake-affected people by working in collaboration with different sectors and stakeholders, especially the private sector, non-governmental organizations (NGOs), and international agencies. The sectors identified to promote livelihoods enhancement and entrepreneurship were construction, tourism, and agriculture. A two-pronged approach was the cornerstone of the livelihood recovery that included livelihood restoration packages and employment creation. The policy also emphasized entrepreneurship promotion.

With this objective in place, the Inclusive Entrepreneurship: Training of Trainers was piloted in Kavrepalanchowk district from September 16–30, 2019.

Fourteen participants (of whom nine are EHRP beneficiaries) were selected from six earthquake-affected districts, Dolakha, Kathmandu, Kavrepalanchowk, Ramechhap, Sindhuli, and Sindhupalchowk. The intensive two-week training followed, focused on four modules:

- **Basic Business Concepts**, to understand the basic enterprise development terminologies and concepts. By the end of this module, one would be able to conceptualize and execute one's own business and help others do the same.

- **Onboarding Persons with Disabilities**, by the end of this module, one would be able to assess business potential for microenterprises for persons with disabilities.
- **Enterprise Development Training for Persons with Disabilities** involved conducting sessions that participants went through in the first five days, and finally,
- The fourth module was on onboarding persons with disabilities.

Persons with disabilities were provided with intensive support, as required, with the training being provided in a one-on-one consultation format for participants with disabilities.

The World Bank's Vice President for the South Asia Region, Mr. Hartwig Schafer, Country Manager for World Bank Nepal, Mr. Faris Hadad-Zervous, Chief Executive Officer of National Reconstruction Authority, Mr. Sushil Gyewali along with other dignitaries visited the training and had a short interaction with the participants.





## Going Beyond Brick and Mortar: Rebuilding Lives Through Entrepreneurship in Nepal

Chiya (tea) Station, a small café in the middle of a busy market in Banepa, Kavrepalanchowk looks similar to other teashops in the area. From the outside, it is yet another emerging business but Pravesh Sharma, the owner, feels otherwise: “Chiya Station offers flavorful tea in matkas (earthen cups). They can be reused and recycled and unlike plastic cups, don’t harm the environment. We are also upcycling thrown away tires to serve as tables. We are different from others that way.”

However, the unique selling point for Pravesh’s Chiya Station is not limited to being environmentally friendly. Wheelchair bound himself, Pravesh aims to make it as inclusive as possible for persons with disabilities. The small shop is wheelchair-accessible and the menus are brailled for the visually impaired.

Pravesh had been considering a tea business for a while; however, participating at the World Bank’s inclusive entrepreneurship training revealed the missing links to establishing his business.

### *Inclusive Entrepreneurship Training*

Pravesh was selected as an entrepreneur in the Inclusive Entrepreneurship: Training of Trainers that took place from September 16 to 30, 2019, in Dhulikhel, Kavrepalanchowk district.

As entrepreneurship promotion is considered key to enhancing income generation and livelihoods support for earthquake-affected people, the World Bank piloted the training, targeting persons with disabilities, as part of Nepal’s EHRP. The aim was to develop a pool of trainers to provide entrepreneurship enhancement trainings to persons with disabilities from earthquake-affected districts.



*“EHRP not only supports building of houses, it also facilitates rebuilding lives, especially for vulnerable people. The methodology focuses behavioral change in participants by moving from sympathy to empathy, and from low self-esteem to self-confidence.”*

– Kamran Akbar

SENIOR DISASTER RISK MANAGEMENT SPECIALIST  
WORLD BANK

Kamran Akbar, Senior Disaster Risk Management Specialist at World Bank Nepal explains the objective of the training: “EHRP not only supports building of houses, it also facilitates rebuilding lives, especially for vulnerable people. The methodology focuses behavioral change in participants by moving from sympathy to empathy, and from low self-esteem to self-confidence.”

The training had a two pronged approach: first to develop a batch of trainers (trainee trainers) on enterprise development, and the second part was for them to orient persons with disabilities become entrepreneurs.

*Though the café venue was identified and rented before he joined the training, Pravesh did not have a proper business plan. His branding was vague and he had not carried out market research, neither did he have a proper marketing strategy. The training helped him with all three issues.*

– Sunil Kumar Limbu,

TRAINER WHO SUPPORTED PRAVESH

Sunil Kumar Limbu, one of the 14 trainee trainers, selected Pravesh as an entrepreneur and supported Pravesh with his business needs in the training. “Though the café venue was identified and rented before he joined the training, Pravesh did not have a proper business plan. His branding was vague and he had not carried out market research, neither did he have a proper marketing strategy. The training helped him with all three issues.”

Chiya Station is one of the eight businesses that trainers supported from planning to implementation phase. The intensive, experiential nature of the training helped bring out skills of trainers, as well as entrepreneurs, to overcome business challenges. “This training is not just about skills. These days, information is available at your fingertips, but if you are determined to run a business, you have to experience it yourself. This training teaches you how to develop and enhance the traits you need for different stages of business process, and for the trainee trainers, how to impart that knowledge to others,” says Shahnaz Kapadia Rahat, master trainer and an established entrepreneur.

*It is heartening to see so many enthusiastic and motivated people gathered here today. Yes, NRA is involved in housing reconstruction but these initiatives are also central to building lives of those affected by the quake. We, at NRA, will look into how we can scale this up in the future and take it to all the earthquake- affected districts.*

– Mr. Sushil Gyewali,

CHIEF EXECUTIVE OFFICER (CEO) OF NRA

The Chief Executive Officer (CEO) of NRA, Mr. Sushil Gyewali, spoke with the participants during the training and assured that NRA will back them up in their future endeavors: “It is heartening to see so many enthusiastic and motivated people gathered here today. Yes, NRA is involved in housing reconstruction but these initiatives are also central to building lives of those affected by the quake. We, at NRA, will look into how we can scale this up in the future and take it to all the earthquake affected districts.”



# Third-party Monitoring

Third-party monitoring of housing reconstruction was initiated in October 2017 to introduce independent monitoring and evaluation of the reconstruction progress of the EHRP. The TPMAs carry out field-level monitoring to technically review the government's inspection scheme on sample basis, and provide technical advice to engineers and technicians involved in the inspection. The objectives of the assignment are to:

- Provide critical data on reconstruction including issues relating to reconstruction;
- Provide independent feedback of project implementation including adherence to due process of inspections by the field engineers for compliance with approved construction standards for multi-hazard resistant reconstruction;
- Make recommendations on improvement or modifications to inspection guidelines and seismic resistant standards due to geographic, logistical or other challenging context.

- Timely identify crucial deviations in project implementation from operations manuals and support the program in achieving compliance with key project rules;
- Timely identify and analyze factors responsible for deviations and recommend the corrective measures; and
- Share the findings of monitoring to facilitate the mainstreaming of good practices and lessons.

In the first phase, an international third-party monitoring firm, Development Project Design and Services (DPDS), Bangladesh, through a joint venture with Devtec Nepal Private Limited, was hired to conduct third-party monitoring in three districts – Dhading, Dolakha, and Nuwakot.

## ■ Key Observations, Good Practices and Lessons from Development Project Design and Services (DPDS) Pvt. Ltd

DPDS carried out third-party monitoring activities of the EHRP in three districts from October 2017 to April 2020. The following are the key observations, lessons, good practices, and recommendations from the third-party monitoring.

### Key Observations

The TPMA was responsible for conducting spot checks of a minimum of 5 percent of houses and follow-up inspection of 1 percent of houses under reconstruction in World Bank-supported districts at various stages of construction—5,750 households each at plinth, roof band, and construction completion levels. During the assignment period from October 2017 to April 2020, the TPMA conducted site inspections of 6,006 for plinth band levels, 6,083 for roof band levels, and 5,827 for construction completion, which are more than the terms of reference target of 5 percent. The TPMA also revisited 175 sites for follow-up inspections.

Among the total 17,916 spot checks conducted by the TPMA, 1,088 major (6.07 percent) and 310 (1.73 percent) minor construction deviations were observed at different stages of inspection. This covers 7.32 percent in Dolakha, 5.87 percent in Nuwakot, and 5.04 percent in Dhading districts.

The TPMA covered 261 wards of 34 rural and urban municipalities in Dhading, Nuwakot, and Dolakha districts, of which 16,828 reconstructed houses (93.9 percent) were found in compliance with the minimum requirement of the Technical Inspection Guidelines.

Reconstructed houses missing key safety parameters that compromise the structural integrity were identified as non-compliant. The non-compliant houses were further categorized into major and minor deviations, where major deviations needed corrective measures. In three districts, a total of 1,088 major and 310 minor deviations were observed.

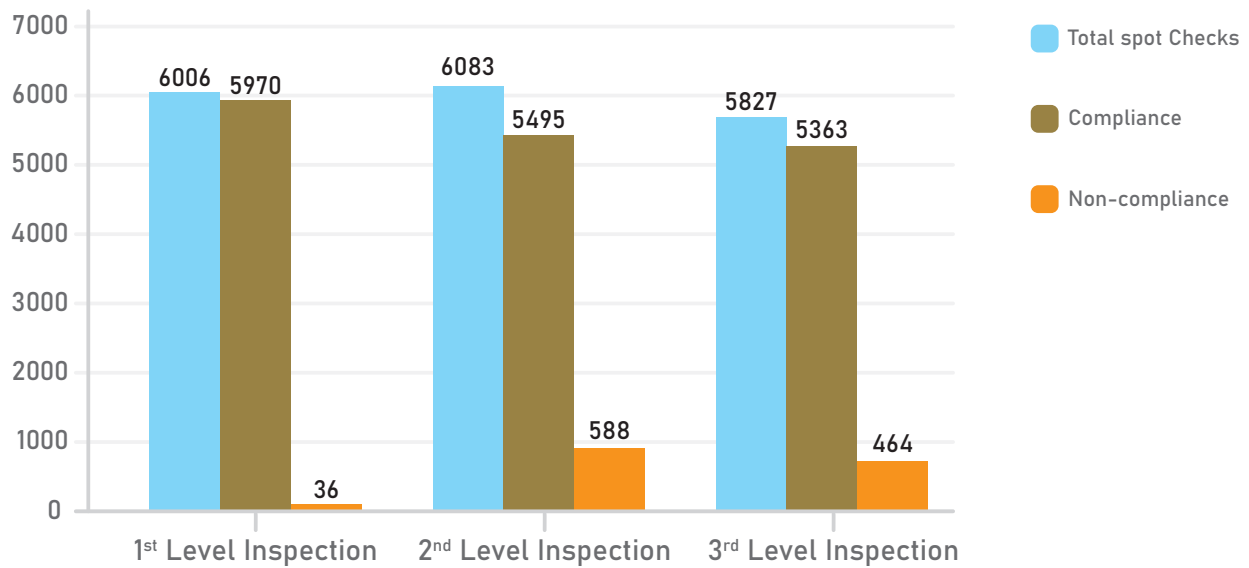
Houses without earthquake-resistant elements observed during physical verification were identified as non-compliant houses. The non-compliant houses were categorized in terms of major and minor deviations. In terms of household numbers, a total of 1,088 major and 310 minor construction deviations were observed.

Table: Summary of observed non-compliances

Inspection stages	Total HH observed	Major Deviations		Minor Deviations	
	Nos.	Nos.	%	Nos.	%
1 <sup>st</sup> Inspection (Plinth Level)	6006	36	0.60	140	2.33
2 <sup>nd</sup> Inspection (Roof Band Level)	6083	588	9.67	103	1.69
3 <sup>rd</sup> Inspection (Construction Completion)	5827	464	7.96	67	1.15
G. Total	17916	1088		310	
Percentage [%] Total			6.07%		1.73%



Figure 1. Summary of TPMA Spot Check Findings at Different Stages of Construction



Despite the growing awareness toward safer reconstruction and trend of good practices, some shortcomings were also observed during the review of the government inspection process. Issues such as inadequate technical assistance and support to the homeowners during reconstruction, unavailability of trained and skilled masons, and lack of support from local elected bodies were some of the issues that hindered the reconstruction and resulted in deviations from the technical standards.

Lack of enforcement of corrective actions rendered several houses non-compliant because the correction of non-compliant houses was not the priority of implementing agencies.

The growing trend of discontinuity of lintel and roof bands was one of the major deviations in reconstruction. The other most common non-compliant issues observed were houses with absence of horizontal bands, unrestrained gables, and construction of excess stories not permitted by construction guidelines.

Lack of clarity in terms of minimum parameters for single-room houses resulted in fragmented practices among engineers. This issue was observed very frequently and thus was raised to the NRA and the World Bank. Consequently, the NRA developed minimum criteria for single-room houses on July 2, 2019.

### Good Practices and Lessons

- In addition to reconstruction of safer and multi-hazard resistant houses, the project activities have contributed towards building resilient communities through widespread awareness about safer construction practices among beneficiaries.
- The project activities generated construction-related opportunities and spurred economic activities contributing toward economic recovery of the people affected by the 2015 earthquake.
- Owner-driven housing reconstruction is effective only if complemented with the provision of adequate STA.
- Lack of clarity on technical guidelines and delay in decision-making resulted in non-compliance and high prevalence of single-room construction.
- The Correction, Retrofitting and Exception Manual is not user-friendly, which, when coupled with lack of trained masons in the field, made it difficult to implement corrective measures in houses found to have major deviations.
- The provision of release of the third tranche of housing grant at the roof band level provided loopholes for deviation from design specifications, resulting in unauthorized modification of reconstructed houses that compromise the overall structural integrity of houses.

## Key Recommendations for Improvement of Ongoing and Future Reconstruction

Based on the spot-check findings, the TPMA has identified specific recommendations for current and future projects of this nature:

- **Focus for compliance of hybrid structures.** Special focus should be given on enforcement of minimum requirement of hybrid structures through capacity building and refresher trainings.
- **Training for new engineers.** As turnover of engineers was high, lack of timely training programs for newly recruited engineers affected the quality of technical assistance and inspection. Hence, there should be provision for regular technical trainings and refreshers for engineers.
- **Prioritize corrective actions.** To enhance the compliance of houses to the technical guidelines, it is imperative to act early on in terms of developing necessary technical guidelines and have trained human resources in place, including trained masons on correction and retrofitting.
- **Regular communication and coordination.** Some noncompliance issues were driven by lack of regular communication and coordination between all key agencies responsible for project implementation. Regular communication and coordination meetings would be important to track progress, identify gaps, maintain uniformity, share experiences, and resolve the issues at the local level.

With the project's extension of housing grant support, the World Bank hired two third-party monitoring firms (SWN, and Mukesh Associates in partnership with BDA), starting July 2019, for the second phase of third-party monitoring, which covered an additional eight districts—Kavrepalanchowk, Sindhuli, Ramechhap, Okhaldhunga, Sindhupalchowk, Gorkha, Rasuwa, and Makwanpur.

The scope of work for all three firms includes monitoring the inspections carried out by Building CLPIU at various stages of construction. The firms also provide technical advice to field inspection teams as needed. For monitoring purposes, the firms are carrying out spot checks of around 5 percent of the houses being constructed under the EHRP.

Below are the summaries of reports from the third-party monitoring effort, conducted by SWN, Mukesh Associates and BDA, and DPDS.





# Challenges and Way Forward

## ■ COVID-19 Challenges

Amidst the uncertainty of the NRA's tenure extension, the COVID-19 pandemic further slowed down the pace of reconstruction.

The COVID-19 challenges also delayed the final approval of the \$5 million RE grant to the GoN. While the groundwork is complete, with restructuring of the project to reflect the new grant's emphasis on supporting long-term disaster resilience in the country, specifically through \$2 million support for the NDRRMA, the assistance is currently awaiting final approval, which was delayed due to COVID-19 challenges.

COVID-19 also caused delays and impediments in providing STA, as activities are mostly field based and door to door. However, with some adjustments, STA provision is well under way.

## ■ Expediting Socio-Technical Assistance

This year, even amidst COVID-19 challenges, the delivery of STA achieved momentum. The 'leaving no one behind' training packages for social mobilizers and mobile masons were finalized after remote consultations and will help those on the frontlines of the reconstruction effort to provide support for those most vulnerable, including single women-headed households and persons with disabilities. A four-day interactive social mobilization training was conducted for field engineers and social mobilizers in 10 of the 14 program districts.

Third-party monitoring reports have noted that the provision of STA through masons and social mobilizers is contributing to smooth provision of technical and social support to homeowners. These teams have been largely local, adding further effectiveness to their services and ensuring quality delivery for many homes.



However, the social mobilization training could not be organized in four districts due to COVID-19. Similarly, an extensive hands-on training for mobile masons, based on the 'Making Homes Accessible to All' manual, and focused on helping mobile masons design and build homes that factor in the needs of persons with disabilities is planned.

The TPMAs also note that, with additional training, mobile masons would be well positioned to implement inclusive building practices as well as corrective techniques on non-compliant homes to bring them in compliance. The NRA should support those providing STA with protective equipment, to ensure they can continue working in safe conditions in the context of COVID-19. As the contracts of social mobilizers and mobile masons are nearing their end dates, STA activities need to be expedited.

Part of the RE grant that is under consideration for the NRA of \$3 million will be used for STA such as training of masons in making homes accessible to all, technical assistance to vulnerable earthquake-affected households that have not started reconstruction or had to abort the process midway, and capacity building of local governments. There are 11,820 vulnerable beneficiary households in 14 most affected districts, who are at different stages of reconstruction, 1,822 of whom have not even enrolled. These potential beneficiaries will be approached to assess reasons for their inability to start reconstruction and provide them with assistance to initiate/resume and complete reconstruction. This will further help the quality and inclusion agendas in reconstruction.

## ■ Livelihood and Economic Recovery

An important strategy of sustainable reconstruction involves regeneration of people's livelihood. The NRA has concentrated much of its resources and time on reconstruction of houses, school, and public building; however, less attention and priority have been given to livelihoods such as agriculture, husbandry, and employment. The RE grant for the NRA is also expected to have a focus on livelihoods enhancement for earthquake-affected households, especially the vulnerable, to ensure infrastructure recovery is complemented with livelihood recovery for the most vulnerable.

## ■ Urban Reconstruction: Housing Finance Market Assessment

The reconstruction in the valley districts has remained slow because of multiple complexities, including land pooling and risk of damage to adjacent houses in case of demolition of destroyed structure. The cost of reconstruction in the valley is also higher than other areas, especially if adjacent houses are to be protected, and attention needs to also be paid to restoring cultural dimension of the valley houses. The technical assistance for housing reconstruction in Kathmandu valley districts will enable the NRA to prepare increasing momentum of reconstruction in the valley districts including reviewing housing finance market and recommending measures to improve them. The terms of reference for the housing finance market assessment have been drafted, with plans to move forward with the assessment in the coming months.

## ■ Building Long-term Disaster Management Capacity

Under the new MDTF RE grant support in the pipeline, \$2 million will be allocated to the NDRRMA, which will undertake medium-to-long-term actions to enhance Nepal's ability to improve long-term disaster resilience. Multiple activities are planned, with a focus on creating sustainable and resilient systems that build on the data, tools, and approaches that are a part of the institutional memory of the NRA, built during the reconstruction effort. One of the key tools that will be developed by the NDRRMA with support from the MDTF will be a multi-hazard disaster risk assessment platform to inform all 753 municipal governments, seven provincial governments, and relevant ministries and departments. Another key piece of NDRRMA work supported by the MDTF will be building and/or strengthening the DRRM capacity of provincial and municipal governments. The project will also be supporting institutional capacity-building activities for NDRRMA, including the establishment of an IT system, equipping of select emergency operations centers, communication and IT equipment, and capacity strengthening of NDRRMA staff.

## ■ International Conference on Nepal's Reconstruction (ICNR)

The World Bank will support the NRA as the leading development partner for the International Conference on Nepal's Reconstruction (ICNR), which is scheduled to take place in 2021. The main purpose of the conference is to share Nepal's experience and learning from the recovery and reconstruction of damaged housing and physical and social infrastructure, as well as the restoration of livelihoods and social services after the 2015 earthquake. The specific objectives are to:

- Share Nepal's experiences in emergency response, reconstruction, and recovery;
- Learn from global experiences and good practices in earthquake risk reduction and management processes;
- Jointly develop key recommendations for disaster risk prevention, preparedness, and management and develop consensus on the needs, possibilities, and means of disaster risk management for the future; and
- Hand over the post-earthquake experience, knowledge, and information to the NDRR-MA, which is an apex institution to coordinate activities related to disaster risk reduction and management and serves as a natural successor to the NRA.

In preparation for the conference, and in order to capture main lessons from reconstruction implementation over five years, the World Bank and MDTF partners are commissioning a study that will serve as a global good practice note. This study will be led by World Bank team in close collaboration with MDTF partners. A core study team will be constituted that will comprise of an expert consultant as lead author, several sector experts hired by the World Bank and a focal person(s) from the consulting firm recruited to provide the overall support to the core team on data collection and analysis, data visualization and reporting, and conducting qualitative review of existing assessments and evaluations of Nepal's housing reconstruction program.









NEPAL EARTHQUAKE  
HOUSING RECONSTRUCTION  
MULTI-DONOR TRUST FUND

[www.nepalhousingreconstruction.org](http://www.nepalhousingreconstruction.org)