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Report No: PAD1494

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED CREDIT

FROM THE IDA CRISIS RESPONSE WINDOW

IN THE AMOUNT OF
SDR 143.9 MILLION
(US\$ 200 MILLION EQUIVALENT)

TO

NEPAL

FOR A

EARTHQUAKE HOUSING RECONSTRUCTION PROJECT

June 18, 2015

Social, Urban, Rural and Resilience (SURR) Global Practice
Bangladesh and Nepal Country Management Unit
South Asia Region

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CURRENCY EQUIVALENTS
(Exchange Rate Effective April 30, 2015)
Currency Unit = Nepalese Rupee (NPR)
NPR 98.26 = US\$1
US\$1.39 = SDR1

GOVERNMENT OF NEPAL FISCAL YEAR
July 16 – July 15

ABBREVIATIONS AND ACRONYMS

| | |
|---------|---|
| ADB | Asian Development Bank |
| BCR | Benefit Cost Ratio |
| BP | Bank Policy |
| CBA | Cost Benefit Analysis |
| CPS | Country Partnership Strategy |
| CQS | Consultant's Qualification |
| DA | Designated Account |
| DC | Direct Contracting |
| DL-PIUs | District-Level Project Implementation Units |
| DRM | Disaster Risk Management |
| DTCO | District Treasury Comptroller Office |
| DUDBC | Department of Urban Development and Building Construction |
| EA | Environmental Assessment |
| EHDC | Earthquake Household Damages and Characteristics |
| ESIA | Environment and Social Impact Assessment |
| ESMF | Environmental and Social Management Framework |
| GoN | Government of Nepal |
| GRM | Grievance Redress Mechanisms |
| GRS | Grievance Redress Service |
| IA | Implementing Agency |
| IBRD | International Bank for Reconstruction and Development |
| ICB | International Competitive Bidding |
| IDA | International Development Association |
| IFR | Interim Financial Report |
| IPF | Indigenous People's Framework |
| ISP | Implementation Support Plan |
| M&E | Monitoring & Evaluation |
| MoFALD | Ministry of Federal Affairs and Local Development |
| MoI | Ministry of Industries |
| MoUD | Ministry of Urban Development |
| NCB | National Competitive Bidding |
| NGO | Non-Governmental Organization |
| NPC | National Planning Commission |
| OP | Operational Policy |
| PDNA | Post-Disaster Damage and Needs Assessment |
| PDO | Project Development Objective |

| | |
|-------|---|
| PIU | Project Implementing Unit |
| PMU | Project Management Unit |
| POM | Project Operations Manual |
| PP | Procurement Plan |
| PRAMS | Procurement Risk Assessment System |
| QCBS | Quality and Cost Based Selection |
| RAP | Resettlement Action Plan |
| RPF | Resettlement Policy Framework |
| SAP | Safeguards Action Plan |
| SDR | Special Drawing Rights |
| SEPA | Procurement Plan Management System |
| SORT | Systematic Operational Risk-Rating Tool |
| ToR | Terms of Reference |

| | |
|----------------------------------|---------------------------|
| Regional Vice President: | Annette Dixon |
| Country Director: | Johannes C.M. Zutt |
| Senior Global Practice Director: | Ede Jorge Ijjasz-Vasquez |
| Practice Manager: | Bernice K. Van Bronkhorst |
| Task Team Leader: | Marc Forni |

NEPAL
EARTHQUAKE HOUSING RECONSTRUCTION PROJECT

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PAD DATA SHEET*Nepal**Earthquake Housing Reconstruction Project (P155969)***PROJECT APPRAISAL DOCUMENT***SOUTH ASIA**0000009081*

Report No.: PAD1494

| Basic Information | | | |
|---|---|--|--|
| Project ID P155969 | EA Category B - Partial Assessment | Team Leader(s) Marc Forni | |
| Lending Instrument Investment Project Financing | Fragile and/or Capacity Constraints [X] - Natural or man-made disaster | | |
| | Financial Intermediaries [] | | |
| | Series of Projects [] | | |
| Project Implementation Start Date 31-Jul-2015 | Project Implementation End Date 31-Jul-2020 | | |
| Expected Effectiveness Date 31-Jul-2015 | Expected Closing Date 31-Jul-2020 | | |
| Joint IFC No | | | |
| Practice Manager/Manager Bernice K. Van Bronkhorst | Senior Global Practice Director Ede Jorge Ijjasz-Vasquez | Country Director Johannes C.M. Zutt | Regional Vice President Annette Dixon |
| Borrower: Government of Nepal | | | |
| Responsible Agency: Ministry of Federal Affairs and Local Development | | | |
| Contact: Telephone No.: | Title: Email: | | |
| Responsible Agency: | Ministry of Urban Development | | |
| Contact: | Title: | | |
| Telephone No.: | Email: | | |
| Safeguards Deferral (from Decision Review Decision Note) | | | |

Will the review of Safeguards be deferred? Yes No

Project Financing Data(in USD Million)

| | | | |
|--|------------------------------------|------------------------------------|--------|
| <input type="checkbox"/> Loan | <input type="checkbox"/> IDA Grant | <input type="checkbox"/> Guarantee | |
| <input checked="" type="checkbox"/> Credit | <input type="checkbox"/> Grant | <input type="checkbox"/> Other | |
| Total Project Cost: | 200.00 | Total Bank Financing: | 200.00 |
| Financing Gap: | 0.00 | | |

| Financing Source | Amount |
|-------------------|--------|
| Borrower | 0.00 |
| IDA Credit in CRW | 200.00 |
| Total | 200.00 |

Expected Disbursements (in USD Million)

| Fiscal Year | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|-------------|-------|-------|--------|--------|--------|--------|
| Annual | 40.00 | 40.00 | 60.00 | 40.00 | 10.00 | 10.00 |
| Cumulative | 40.00 | 80.00 | 140.00 | 180.00 | 190.00 | 200.00 |

Institutional Data

Practice Area (Lead)

Social, Urban, Rural and Resilience Global Practice

Contributing Practice Areas

Social Protection, Trade and Competitiveness

Cross Cutting Topics

- Climate Change
- Fragile, Conflict & Violence
- Gender
- Jobs
- Public Private Partnership

Sectors / Climate Change

Sector (Maximum 5 and total % must equal 100)

| Major Sector | Sector | % | Adaptation Co-benefits % | Mitigation Co-benefits % |
|--|-------------------------------|-----|--------------------------|--------------------------|
| Industry and Trade | Housing construction | 60 | 90 | 0 |
| Public administration, law and justice | General public administration | 10 | 5 | 0 |
| Health and other social services | Other social services | 30 | | |
| Total | | 100 | | |

I certify that there is no Adaptation and Mitigation Climate Change Co-benefits information applicable to this project.

Themes

Theme (Maximum 5 and total % must equal 100)

| Major theme | Theme | % |
|---------------------------------------|-----------------------------------|-----|
| Social Protection and Risk management | Natural disaster management | 10 |
| Social Protection and Risk Management | Social Safety Nets | 10 |
| Rural development | Rural services and infrastructure | 80 |
| Total | | 100 |

Proposed Development Objective(s)

The Project Development Objective (PDO) is to restore affected houses with multi-hazard resistant core housing units in targeted areas and to enhance the government's ability to improve long-term disaster resilience.

Components

| Component Name | Cost (USD Millions) |
|----------------------------------|---------------------|
| Housing Reconstruction | 185.00 |
| Disaster Risk Management Systems | 10.00 |
| Project Implementation Support | 5.00 |
| Contingency Emergency Response | 0.00 |

Systematic Operations Risk- Rating Tool (SORT)

| Risk Category | Rating |
|---|-------------|
| 1. Political and Governance | Substantial |
| 2. Macroeconomic | Low |
| 3. Sector Strategies and Policies | Moderate |
| 4. Technical Design of Project or Program | Substantial |
| 5. Institutional Capacity for Implementation and Sustainability | Substantial |
| 6. Fiduciary | High |
| 7. Environment and Social | Substantial |
| 8. Stakeholders | Substantial |
| 9. Other | |
| OVERALL | Substantial |

Compliance

Policy

| | | | |
|---|------------------|--|------------------|
| Does the project depart from the CAS in content or in other significant respects? | Yes [] | No [X] | |
| Does the project require any waivers of Bank policies? | Yes [] | No [X] | |
| Have these been approved by Bank management? | Yes [X] | No [] | |
| Is approval for any policy waiver sought from the Board? | Yes [] | No [X] | |
| Does the project meet the Regional criteria for readiness for implementation? | Yes [X] | No [] | |
| Safeguard Policies Triggered by the Project | | | |
| | Yes | No | |
| Environmental Assessment OP/BP 4.01 | X | | |
| Natural Habitats OP/BP 4.04 | X | | |
| Forests OP/BP 4.36 | X | | |
| Pest Management OP 4.09 | | X | |
| Physical Cultural Resources OP/BP 4.11 | X | | |
| Indigenous Peoples OP/BP 4.10 | X | | |
| Involuntary Resettlement OP/BP 4.12 | X | | |
| Safety of Dams OP/BP 4.37 | | X | |
| Projects on International Waterways OP/BP 7.50 | | X | |
| Projects in Disputed Areas OP/BP 7.60 | | X | |
| Legal Covenants | | | |
| Name: | Recurrent | Due Date | Frequency |
| PMU | Yes | August 1, 2015 | Project duration |
| Description of Covenant: | | | |
| Recipient to establish and maintain (subject to paragraph 3 of the Section I.A of Schedule 2 to the FA), the PMU, with membership, powers, functions and competencies acceptable to the Association. | | | |
| Name: | Recurrent | Due Date | Frequency |
| Project implementing units | Yes | August 1, 2015 | Project duration |
| Description of Covenant | | | |
| Recipient to establish and maintain two project implementing units, one within MoUD and one within MoFALD, with adequate professional and administrative staff, in numbers and with qualification and experience, and under terms of reference satisfactory to the Association. | | | |
| Name: | Recurrent | Due Date | Frequency |
| District – Level PIUs | Yes | Earlier of September 1, 2015 or the first date on which a Housing Grant is proposed to be first released in the concerned district | Project duration |

| | | | |
|---|------------------|--|------------------|
| Description of Covenant | | | |
| Recipient to establish and maintain throughout the period of implementation of the Project, one or more district-level project implementation units (the “DL-PIUs”), meeting the requirements set forth in the Operations Manual. | | | |
| Name: | Recurrent | Due Date | Frequency |
| Operations Manual | Yes | Earlier of the September 15, 2015 or the first date on which a Housing Grant is first proposed for release | Project duration |
| Description of Covenant | | | |
| Recipient to prepare and through each MoFALD and MoUD adopt and carry out the Project in accordance with the Operations Manual, acceptable to the Association. | | | |
| Name: | Recurrent | Due Date | Frequency |
| Disclosure of Beneficiary List | No | By no later than fifteen (15) days before the date on which a Housing Grant is first proposed for release | N/A |
| Description of Covenant | | | |
| Recipient to publicly disclose the list of such eligible household beneficiaries at the Project relevant sites. | | | |
| Name: | Recurrent | Due Date | Frequency |
| Participation in the Project | Yes | Before providing a Housing Grant to a Participating Household Beneficiary | Project duration |
| Description of Covenant | | | |
| Recipient to enter into a Participation Agreement with each Participating Household Beneficiary under terms and conditions set forth in the Operations Manual. | | | |
| Name: | Recurrent | Due Date | Frequency |
| Payment Service Providers | Yes | By no later than the date on which a Housing Grant is first proposed for release | Project duration |
| Description of Covenant | | | |
| Recipient shall engage the services of one or more payment service providers in accordance with criteria acceptable to the Association as set forth in the Operations Manual and conclude and implement one or more payment service agreements in form and substance satisfactory to the Association. | | | |
| Name: | Recurrent | Due Date | Frequency |

| | | | |
|---|------------------|--|------------------|
| | Yes | Prior to the release of the second and subsequent tranches of Housing Grant | Project duration |
| Description of Covenant | | | |
| Recipient to ensure that the verification procedures are carried out in accordance with in the Operations Manual and that the proceeds of the Credit are only used to pay for Housing Grants to Participating Household Beneficiaries that have completed reconstruction of their multi-hazard resilient core housing unit, in accordance with the quality standards set forth in the Operations Manual. | | | |
| Name: | Recurrent | Due Date | Frequency |
| Grievance Redress Mechanism | Yes | Prior to the public disclosure of the list of eligible household beneficiaries | Project duration |
| Description of Covenant | | | |
| Recipient shall establish and maintain an efficient and cost effective grievance redress mechanism, based on international experience and best practices adapted to the local context, as further described in the Operations Manual. | | | |
| Name: | Recurrent | Due Date | Frequency |
| Safeguards - General | Yes | Prior to the payment of any Housing Grant | Project duration |
| Description of Covenant | | | |
| Recipient to carry out the Project in accordance with the ESMF, the RPF, and the IPPF, and the instruments (to be) prepared thereunder (the “Safeguard Documents”) and refrain from taking any action, or consenting to an action to be taken, which would prevent or interfere with the implementation of the Safeguard Documents. | | | |
| Name: | Recurrent | Due Date | Frequency |
| Safeguards – Screening Reports | Yes | Prior to the payment of any Housing Grant | |
| Description of Covenant | | | |
| Recipient to refrain from releasing any Housing Grant until and unless a social and environmental screening has been carried out, in accordance with the guidelines, standards and procedures set forth in the ESMF, the RPF, and the IPPF and publicly disclose the Safeguard Documents and the related Housing Reconstruction Guidelines environmental and social safeguards checklists in local language(s) at the Project relevant sites. | | | |
| Name: | Recurrent | Due Date | Frequency |
| Safeguard Reporting & Monitoring | Yes | N/A | Semi-annually |
| Description of Covenant | | | |
| Recipient to: (i) maintain monitoring and evaluation protocols and record keeping procedures to supervise and assess compliance with Safeguard Documents; and (ii) report on quarterly basis on compliance with Safeguard Documents. | | | |
| Name: | Recurrent | Due Date | Frequency |

| | | | |
|---|---------------------------------|-----------------|------------------|
| Safeguards – Other sources | Yes | N/A | Project duration |
| Description of Covenant | | | |
| With respect to any housing reconstruction activities for which technical support is provided under the Project, but the activities are themselves financed from sources other than the Credit, Recipient to retain sole responsibility for the design, construction, safeguards, fiduciary controls and implementation of such activities and to ensure that all activities financed, in whole or in part, out of the proceeds of the Credit are made in accordance with the Operations Manual, the Safeguards Documents, and the Financing Agreement. | | | |
| Name: | Recurrent | Due Date | Frequency |
| CER Component | No | N/A | If triggered |
| Description of Covenant | | | |
| Recipient to: (a) determine the occurrence of an eligible crisis or emergency; (b) prepare a component-specific operations manual; (c) identify, strengthen and maintain a coordination authority capable of carrying out the activities and responsibilities set forth in the operations manual; and (d) prepare and disclose any required safeguard document. | | | |
| Name: | Recurrent | Due Date | Frequency |
| Housing grants | Yes | N/A | Project duration |
| Description of Covenant | | | |
| Recipient to ensure that the total amount of disbursements against achievement of outputs under the Project does not exceed the total amount of expenditures incurred by the Participating Household Beneficiary. | | | |
| Conditions | | | |
| Source of Fund: | Name: | Type: | |
| Credit | Emergency Contingency Component | Disbursement | |
| Description of Condition | | | |
| To access the funds allocated from time to time to Category 3, Recipient must have determined/declared an eligible crisis or emergency, identified response activities and expenditures, prepared and disclosed any required safeguard documents, identified and/or staffed a coordination authority responsible for implementation, and prepared a component-specific operations manual. | | | |
| Conditions | | | |
| Source of Fund: | Name: | Type: | |
| Credit | Housing Grants | Disbursement | |
| Description of Condition | | | |
| To access the funds allocated to Category 2, Recipient must have: (i) adopted an Operations Manual satisfactory to the Association; and (ii) adopted and published the ESMF, the RPF, and the IPPF, all in a form and substance satisfactory to the Association; and (iii) engaged financial management staff in MoFALD and MoUD in such number and with qualification, experience and terms of reference satisfactory to the Association. | | | |
| Source of Fund: | Name: | Type: | |
| Credit | Housing Grants | Disbursement | |
| Description of Condition | | | |

Notwithstanding the provisions of Section IV.A of Schedule 2, withdrawals under Category (2) shall be output-based and shall be available for withdrawal by the Recipient subject to: (i) the Association having communicated in writing to the Recipient the unit amount of each Housing Grant; (ii) such Participating Household Beneficiary having satisfactorily achieved the agreed output in the construction work of the multi-hazard resilient core housing unit, subject to the verification mechanisms provided for in paragraph 8 of Section I.D of this Schedule as further detailed in the Operations Manual; and (iii) the Association having received, through the Recipient, a satisfactory summarized version of the reports furnished by the verifiers for such works.

Team Composition

Bank Staff

| Name | Role | Title | Specialization | Unit |
|-----------------------|----------------------------------|--|--------------------------|-------|
| Marc S. Forni | Team Leader (ADM Responsible) | Senior Disaster Risk Management Specialist | Disaster Risk Management | GSURR |
| Raja Rehan Arshad | Team Member | Lead Disaster Risk Management Specialist | Disaster Risk Management | GCCDR |
| Chaohua Zhang | Safeguards Specialist | Lead Social Development Specialist | Social Development | GSURR |
| Shambhu Prasad Uprety | Procurement Specialist | Senior Procurement Specialist | Procurement | GGODR |
| Yogesh Bom Malla | Financial Management Specialist | Financial Management Specialist | Financial Management | GGODR |
| Timila Shrestha | Team Member | Financial Management Specialist | Financial Management | GGODR |
| Rajat Narula | Team Member | Senior Financial Management Specialist | Financial Management | GGODR |
| Deepak Singh | Team Member | Senior Disaster Risk Management Specialist | Disaster Risk Management | GSURR |
| Drona Raj Ghimire | Environmental Specialist | Environmental Specialist | Environment | GENDR |
| Federica Ranghieri | Team Member | Senior Urban Specialist | Disaster Risk Management | GSURR |
| Giovanni Bo | Counsel | Counsel | Legal | LEGES |
| Sudyumna Dahal | Team Member | Economist | Macroeconomic Analysis | GMFDR |

| | | | | |
|----------------------------|-------------|--|-------------------------------|-------|
| Roshan Darshan Bajracharya | Team Member | Senior Economist | Macroeconomic Analysis | GMFDR |
| Rajib Upadhya | Team Member | Senior External Affairs Officer | External Affairs | SAREC |
| Bigyan B. Pradhan | Team Member | Senior Operations Officer | Operations | SACNP |
| Robert John Soden | Team Member | Consultant | Open Data | GCCDR |
| Keiko Saito | Team Member | Disaster Risk Management Specialist | Geospatial and Remote Sensing | GCCDR |
| Alanna Leigh Simpson | Team Member | Senior Disaster Risk Management Specialist | Risk Assessment | GCCDR |
| Bandita Sijapati | Team Member | Social Development | Social Development | GSURR |
| Hemang D. Karelia | Team Member | Operations Officer | Disaster Risk Management | GCCDR |
| Jasmine Rajbhandary | Team Member | Social Protection Specialist | Social Protection | GSPDR |
| Jun Zeng | Team Member | Senior Social Development Specialist | Social Development | GSURR |
| Jyoti Maya Pandey | Team Member | Consultant | Social Protection | GSPDR |
| Keiko Kaneda | Team Member | Operations Officer | Disaster Risk Management | GCCDR |
| Kelly Johnson | Team Member | Senior Social Protection Specialist | Social Protection | GSPDR |
| Yohannes Yemane Kesete | Team Member | E T Consultant | Disaster Risk Management | GSURR |
| Navid Rahimi | Team Member | E T Consultant | Disaster Risk Management | GSURR |
| Neha Pravash Kumar Mishra | Team Member | Senior Environmental Specialist | Environment | GENDR |
| Annu Rajbhandari | Team member | ET Consultant | Environment | GENDR |
| Pradeep Kumar Shrestha | Team Member | Consultant | Financial Management | GGODR |
| Shyam KC | Team Member | Senior Water & Sanitation Spec. | Disaster Risk Management | GWADR |

| | | | | | |
|---|--------------------------------------|--|------------------------------|---------------|-----------------|
| Swarna Kazi | Team Member | Disaster Risk Management Specialist | Disaster Risk Management | GSURR | |
| Yasuhiko Matsuda | Team Member | Senior Public Sector Specialist | Social Protection | GSPDR | |
| Alina Thapa | Team Member | Temporary | Team Assistant | SACNP | |
| Mani Muthukumara | Team Member | Lead Economist | Economic Analysis | SARCE | |
| Sushenjit Bandyopadhyay | Team Member | Consultant | Economic Analysis | SARCE | |
| Ignacio M. Urrutia Duarte | Team Member | E T Consultant | Operations | GSURR | |
| Sulochana Nepali | Team Member | Team Assistant | | SACNP | |
| Jehan Arulpragasam | Peer-Reviewer | Practice Manager | Social Protection | GSPDR | |
| Jolanta Kryspin-Watson | Peer-Reviewer | Lead Disaster Risk Management Specialist | Disaster Risk Management | GSURR | |
| Shahnaz Arshad | Peer-Reviewer | Senior Urban Specialist | Post-Disaster Reconstruction | GSURR | |
| Extended Team | | | | | |
| Name | Title | Office Phone | Location | | |
| David Lallemand | Consultant, Structural Assessment | | Palo Alto, California | | |
| Peeyush Sekhsaria | Consultant, Disaster Risk Management | | New Delhi, India | | |
| Rajendra Desai | Consultant, Housing Reconstruction | | New Delhi, India | | |
| Locations | | | | | |
| Country | First Administrative Division | Location | Planned | Actual | Comments |
| Nepal | TBD | | X | | |
| Consultants (Will be disclosed in the Monthly Operational Summary) | | | | | |
| Consultants Required? Consultants will be required | | | | | |

I. INTRODUCTION

1. On April 25, 2015, a 7.8 magnitude earthquake struck central Nepal. That earthquake and its sequence of aftershocks caused 8,700 deaths and some 25,000 injuries. A Post-Disaster Needs Assessment (PDNA), completed on June 15, found that total damages and losses resulting from the earthquake sequence amounted to about \$7 billion, and reconstruction needs amounted to about \$6.7 billion. As the earthquake sequence destroyed 490,000 houses—mostly traditional mud-brick and mud-stone houses built and occupied by the rural poor—and rendered another 265,000 houses at least temporarily uninhabitable, the largest single need identified in the PDNA was housing and human settlements, accounting for \$3.27 billion of needs (or almost half of the total needs). This proposed \$200 million housing reconstruction project is being financing out of the IDA Crisis Response Window (CRW), and it will enable the reconstruction of about one-tenth of the housing destroyed in the earthquake sequence. An accompanying Multi-Donor Trust Fund (MDTF) is also being established to enable development partners who are interested in contributing to housing reconstruction to participate in this effort.

II. STRATEGIC CONTEXT

A. Country Context (before the earthquake on April 25, 2015)

2. Nepal is highly vulnerable to a range of natural hazards, particularly earthquakes, flood, drought, and landslides. All of Nepal is exposed to significant earthquake hazard resulting from the convergence of the Indian tectonic plate with the Eurasian plate, which also drives the uplift of the Himalayan mountain range. In addition, much of the country is drought prone as well as susceptible to floods, and landslides. According to the Natural Disasters Hotspots Report¹, Nepal is ranked as the 11th most vulnerable country in the world to earthquakes and 30th to flood risks. Combining these hazards, and the high level of vulnerability to both, the country is ranked second in the world to mortality risk from two or more hazards. Approximately 80 percent of its geographic area is at risk from multiple natural hazards, with the vast majority of the population inhabiting these high-risk areas. The frequency and intensity of natural hazards coupled with an agriculture-dependent population with lack of adequate infrastructure such as roads, drinking water, irrigation etc., makes Nepal highly vulnerable to hazards.

3. Nepal is a landlocked country with diverse geographic and climatic features that expose it to a number of natural hazards. More than 6,000 rivers including the four major basins Kosi, Gandaki, Karnali and Mahakali drain into the Gangetic plains before feeding the southern lowland plains of the Terai. The hill region, known as Pahad, has high altitude variations, while the mountainous region, known as Parbat, is formed by the Himalayan Mountains. Given this geographic profile, the climate varies from subtropical in the lower areas to alpine in its higher elevations in a short span of 200-300km. Corresponding to this variation in geography and climate; Nepal is extremely vulnerable to water-related hazards. Nepal's annual rainfall is highly variable, with the monsoon bringing 80 percent of Nepal's rainfall in less than three months during the summer. Nepal's lowland Terai districts routinely suffer from devastating floods affecting large, poor populations.

¹ The World Bank: *Natural Disaster Hotspots, A Global Risk Analysis* (Washington, DC: Disaster Risk Management Series, 2005)

4. This high exposure and high vulnerability to natural hazards makes the country susceptible to very high losses from disaster, both in terms of mortality as well as percent GDP loss. The cities along the foot hills are exposed to floods, landslides and earthquakes. As mentioned above, rapid and unplanned urbanization in the Kathmandu Valley has significantly increased its risk to earthquakes. The population of Kathmandu valley has increased dramatically, from 1.5 million in 2001 to 2.5 million in 2011 when the latest census was conducted. The necessary construction of housing and infrastructure to support this increased population has taken place without proper implementation of the 1994 building code and its seismic provisions. In fact the ubiquitous practice of incremental expansion of buildings over time is often the norm, a practice that significantly increases building vulnerability to earthquakes.

5. The Himalayan Mountains is an area of intense seismic activity that results from the tectonic collision of the Indian and Eurasian plates. During the 1934 M8.2 Nepal-Bihar earthquake, which had an epicenter 175 km from Kathmandu, almost all buildings collapsed in Kathmandu, Bhaktapur and Patan and casualties were estimated to be as high as 12,000. Other major earthquakes were recorded in 1897, 1905, 1934, and 1950. Seismic experts estimated in 2005 that at least four M8.6 events would need to occur in the Himalayas to release the tectonic strain accumulated by the plate collision over recent centuries. The earthquakes on April 25 and May 12, and accompanying aftershocks have therefore not released all of the accumulated energy in the plate boundary, and the region may therefore experience further large magnitude earthquakes in the coming years or decades.

6. Since 1970 and up until the April 25, 2015 earthquake, more than 8,000 deaths were recorded from natural hazards in Nepal, with nearly 10 million people cumulatively affected during that period. The most significant event during this period was the 1993 floods and landslides which killed over 1,300 people and caused economic losses of nearly US\$1 billion. Landslides, which impact seven times fewer people than floods, threaten a number of rural hill communities and regularly disrupt economic activities through the destruction or blockage of infrastructure. While the past 40 years have not seen many earthquake events, the risk is very significant. The 1988 earthquake killed over 700 people. Droughts, storms, avalanches, and Glacial Lake Outburst Floods (GLOFs) are hazards also regularly threatening lives and livelihoods in Nepal.

7. Over the past decade, Nepal has been performing reasonably well on the economic front. Growth² averaged 4.3 percent over 2005-14. Inflation remained in single digits for most of the decade, with the peg of the Nepalese rupee to the Indian rupee providing a stable nominal anchor. Fiscal balances remained sustainable owing to strong revenue growth and modest spending. Overall poverty incidence fell from over 50 percent in 2003/04 to less than 25 percent in 2010/11 (allowing Nepal to achieve MDG 1 ahead of time). Most multidimensional indicators of poverty³ also showed improvements across regions. These outcomes were principally driven by rises in farm incomes, remittance receipts and non-farm wage incomes, with the bulk of poverty reduction taking place in rural areas where four out of five Nepalese continue to live. Access to services increased significantly for most Nepalese, including women. As of the beginning of 2015, primary

²Market price.

³ Including 'child out of school', 'time taken to primary school', 'safe deliveries', 'access to electricity'

education was accessible to virtually all and immunization coverage against major preventable illnesses was close to 90 percent.

8. However, even before the April 25, 2015 earthquake struck, challenges to sustaining and amplifying these gains remained. Although the poverty headcount has fallen to 25 percent, households remain vulnerable to falling below the poverty line (defined as US\$ 1.25/day) during a shock, as over 70 percent of Nepalis live on less than US\$2.50 per day. Malnutrition also remains a serious problem, especially among children. According to USAID Feed the Future program, 29 percent of children under 5 are underweight, and 41 percent suffer from stunting. The Government of Nepal has numerous social programs through multiple ministries, to address these problems, although inadequate designs and/or insufficient scale limit their effectiveness. The Government of Nepal and the World Bank have been working together to support Nepal's social protection strengthening agenda through two recently closed projects and ongoing trust-funded technical assistance.

B. Situations of Urgent Need of Assistance or Capacity Constraints

9. On Saturday April 25, 2015, a major earthquake occurred at shallow depth with a magnitude of 7.8 in central Nepal causing widespread destruction. The ensuing sequence of aftershocks, including one of magnitude 7.3 on May 12, caused further casualties and damage. In total, the Government has reported more than 8,700 deaths and 25,000 people injured – numbers that would have been substantially higher had the earthquake occurred in the nighttime. The earthquake also triggered extensive landslides and avalanches causing further damage and disruption in essential services. A Post-Disaster Needs Assessment (PDNA), led by the National Planning Commission and completed on June 15, found that total damages and losses resulting from the earthquake sequence amounted to about \$7 billion, and reconstruction needs amounted to about \$6.7 billion. As the earthquake sequence destroyed or rendered uninhabitable about 755,000 houses—mostly traditional mud-brick and mud-stone structures built and occupied by the rural poor—the largest single need identified in the PDNA was housing and human settlements, accounting for \$3.27 billion of needs (or almost half of the total needs).

10. The impacts of the recent earthquake disaster are significant, both in the short and medium term. The negative repercussions include: i) an expected immediate rise in poverty levels in affected areas in the absence of social safety nets and given the disruption in existing community driven development programs and non-commercial agriculture; ii) a deterioration in human capital outcomes, specifically in health and education, especially if services are not able to resume in a timely manner; and, iii) a rise in unemployment and under-employment as natural-resource based local economies are severely affected. While humanitarian assistance may alleviate the impacts to households in the very short term, rapid and substantial funding is needed for recovery and reconstruction to mitigate the negative impacts over the months and years to come.

11. The immediate impact on poverty, livelihood and output is likely to be severe. Preliminary estimates are that, in the most heavily affected districts (which includes Kathmandu), about 9.4 million people are affected. Rural poverty rates in the affected districts were higher than the national average at 28.6 percent in 2010/11. Initial analysis suggests that the earthquake will push

an additional 2.5-3.5 percent of Nepalis (700,000-982,000 people) into poverty in 2015/16. Further, within the most affected districts, the impacts are disproportionately felt by the poorest quintiles of the population. Even within the relatively prosperous areas that have been affected, households that were already either poor or vulnerable have been particularly exposed.

Post Disaster Needs Assessment

12. The World Bank, United Nations Development Program (UNDP) and European Union (EU), upon receiving a request from the National Planning Commission (NPC) of the Government of Nepal (GoN), supported a Post Disaster Needs Assessment (PDNA). This Assessment was led by the NPC to determine the impact of the earthquake event from May 15 to June 15, 2015. The PDNA will feed into the government's FY16-17 fiscal budget and inform the donor conference that will be held on June 25, 2015.

13. The PDNA estimates that the total needs arising from the earthquake amounts to US\$6.66 billion, or about 30 percent of GDP, of which almost half (US\$3.27 billion) is housing. This is based on estimates of the areas affected and of the proportion of assets to be replaced or rebuilt. The impact of the damage on productivity also depends on the extent to which critical network infrastructure (e.g. power, roads) are damaged and the time needed for repairs.

14. In the affected districts approximately 490,000 houses have been destroyed and 265,000 houses have been substantially damaged, effectively rendering some 3.5 million people homeless. More than 3,000 public buildings have also been destroyed or damaged, in addition to the loss of a rich set of historical monuments and cultural icons. This is a large-scale disaster affecting almost ten million people across at least 30 districts, which will require a major and sustained recovery effort. A summary of the damages and losses, and the resulting needs can be found in the table below. As can be seen in the table, total damages and losses for traditional infrastructure sectors such as water, energy and transport range between US\$100 and 200 million. After housing, the education sector suffered the second highest damages and losses at approximately US\$300 million, while the impact on the health sector is US\$60 million total.

Post-Disaster Needs Assessment (US\$ millions)

| Sector | Damage | Loss | Total Disaster Effect | Lost Personal Income | Total Needs |
|----------------------------|---------------|-------------|------------------------------|-----------------------------|--------------------|
| Agriculture | 160.8 | 117.3 | 278.1 | 45.1 | 152.5 |
| Communications | 35.4 | 49.8 | 85.2 | 0.0 | 48.4 |
| Community Infrastructure | 32.8 | 0.0 | 32.8 | 0.0 | 43.6 |
| Cultural Heritage | 165.8 | 22.7 | 188.5 | 0.0 | 201.6 |
| Disaster Risk Reduction | 0.2 | 1.3 | 1.5 | 0.0 | 80.4 |
| Education | 275.1 | 31.9 | 307.0 | 0.0 | 389.3 |
| Electricity | 174.6 | 33.7 | 208.3 | 0.0 | 182.2 |
| Employment and Livelihoods | 0.0 | 0.0 | 0.0 | 0.0 | 123.0 |
| Environment and Forestry | 323.1 | 10.4 | 333.5 | 0.0 | 247.0 |
| Financial Sector | 43.1 | 263.6 | 306.7 | 0.0 | 322.1 |

| | | | | | |
|---------------------------------|----------------|----------------|----------------|--------------|----------------|
| Gender and Cross Cutting Issues | 0.0 | 0.0 | 0.0 | 0.0 | 10.6 |
| Governance | 163.6 | 0.0 | 163.6 | 0.0 | 163.2 |
| Health and Population | 51.0 | 11.2 | 62.1 | 0.0 | 110.5 |
| Housing and Human Settlements | 2,976.8 | 458.3 | 3,435.1 | 0.0 | 3,213.4 |
| Industry and Commerce | 170.7 | 165.4 | 336.1 | 62.0 | 268.7 |
| Irrigation | 3.8 | 0.0 | 3.8 | 0.0 | 4.6 |
| Nutrition | 0.0 | 0.0 | 0.0 | 0.0 | 49.4 |
| Social Protection | 0.0 | 0.0 | 0 | 0.0 | 62.7 |
| Tourism | 184.9 | 611.6 | 796.5 | 60.8 | 405.3 |
| Transport | 168.5 | 48.3 | 216.8 | 0.0 | 276.3 |
| Water and Sanitation | 103.0 | 8.6 | 111.6 | 0.0 | 177.5 |
| Total | 5,033.1 | 1,834.1 | 6,867.3 | 167.9 | 6,532.4 |

C. Sectoral and Institutional Context

15. In 2009 the GoN officially launched the National Risk Reduction Consortium (NRRC) to bring together international financial institutions such as the World Bank and the Asian Development Bank (ADB), development partners including the International Federation of the Red Cross (IFRC) and the World Health Organization (WHO), and various United Nations (UN) agencies such as the UN Development Programme (UNDP) and the UN Office for the Coordination of Humanitarian Affairs (UNOCHA) to coordinate and fund disaster risk reduction efforts. Other consortium members include the United Kingdom Department for International Development (DfID), the United States Agency for International Development (USAID), Australian Aid, the European Commission (EC), and the Japan International Cooperation Agency (JICA). The uptake of this initiative was slow prior to the April 25 earthquake, with only a limited amount of funds committed, despite a need for hundreds of millions of dollars in funding to reduce existing risk and to prevent the creation of new risks.

16. The Bank's own engagement on disaster risk management (DRM) has focused on increasing the understanding of seismic risk among government officials, and effectively utilizing this information to improve resilience. An ongoing Global Facility for Disaster Risk Reduction and Recovery (GFDRR) financed initiative is supporting the government to undertake a detailed vulnerability assessment of public sector buildings, including schools, health centers, and public administration buildings. The South Asia Open Cities initiative is the platform for collecting the exposure and vulnerability data. This program utilizes low cost, open source tools such as GeoNode and OpenStreetMap to engage government officials and the local community in mapping the exposure of infrastructure and building assets across Kathmandu Valley.

17. The National Disaster Management Plan, developed in 1993 and endorsed by the Government in 1996, emphasizes the need to bring the natural resources management, climate change, and development together with disaster management. In this context, the Bank also has a US\$35 million PPCR funded Hydromet Modernization program under implementation with the

GoN, focusing on improved management of climate variability and climate induced natural disasters.

Rationale for the Bank’s Involvement and Recovery Strategy

18. Following the earthquake, the Bank began providing advice and support to the GoN on how to consider and design reconstruction and recovery efforts. The Bank has demonstrated global and regional experience in post-disaster housing reconstruction and social protection - in such countries as Pakistan, India, Haiti, the Philippines, and Indonesia - and is well positioned to bring its expertise and experience to support GoN through recovery and reconstruction.

19. The GoN will lead the overall housing reconstruction efforts nationally through a housing reconstruction program meant to encompass all of the housing stock to be rebuilt. It serves as a coordinating framework to standardize housing reconstruction policy, irrespective of the funding sources. The proposed Nepal Earthquake Housing Reconstruction Project will provide direct financing for grants and technical support to approximately 55,000 participating households and also inform operational modalities for the development of the government’s overall housing reconstruction program. Eligibility, targeting, and sequencing will be defined in agreement with the GoN and detailed in a Project Operations Manual (POM) based on a detailed Earthquake Household Damages and Characteristics (EHDC) Survey. It is envisioned that a Multi-Donor Trust Fund (MDTF) would be established to meet an additional portion of the reconstruction needs of households affected by the earthquake and crowd in further funding towards the government’s housing reconstruction efforts. The GoN will determine the level of external involvement in implementation and supervision in line with the respective sources of financing. The Bank will supervise and provide implementation support for housing reconstruction directly financed by the proposed Project. The need for GoN to enter into a memorandum of understanding with development partners to facilitate a common approach to safeguards standards will be determined during project implementation.

20. The proposed Project takes into account the lessons from other similar disaster events and the multi-sectoral needs assessment undertaken during the PDNA, and it is part of a broader package to support the GoN’s reconstruction and recovery efforts and to increase resilience, strengthen capacity, and better manage emergency events.

D. Higher Level Objectives to which the Project Contributes

21. The proposed Project is aligned to the Bank’s Nepal Country Partnership Strategy (CPS FY14-18, Report No. 83148-NP) to enhance disaster risk management systems. The Project is solidly anchored within the “Foundations and Cross-Cutting Dimensions” of the Nepal CPS, which states that the “...risks from natural disaster will also continue to be addressed in a cross-cutting manner by the World Bank.”

III. PROJECT DEVELOPMENT OBJECTIVES

A. PDO

22. The Project Development Objective (PDO) is to restore affected houses with multi-hazard resistant core housing units in targeted areas and to enhance the government's ability to improve long-term disaster resilience.

B. Project Beneficiaries

23. The Project's direct beneficiaries are approximately 55,000 households in the targeted areas that will receive grants and technical support to rebuild their houses incorporating multi-hazard resistant features. The Project will also inform operational modalities for the development of the government's overall housing reconstruction program, which would benefit all eligible housing reconstruction beneficiaries estimated to be approximately 490,000 households.

C. PDO Level Results Indicators

24. The key indicators for tracking progress towards the PDO can be found below. Targets have been based on experience from other countries and will be monitored for their realism during implementation and suitably adjusted as needed.

- Households with resilient core housing reconstructed under the project.
- Citizens made aware of earthquake resilient reconstruction.
- Government officials trained on Disaster Risk Management.

IV. PROJECT DESCRIPTION

A. Project Components

Component 1: Housing Reconstruction- *US\$185 million*

25. The component will finance: (a) the provision of *housing grants* for reconstruction of approximately 55,000 multi-hazard resilient core housing units. Eligibility will be determined by an assessment of recovery needs and willingness to participate and adhere to project guidelines for resilient construction, quality standards and timelines; and (b) the establishment of a program of owner-driven housing reconstruction in targeted areas including: i) social, environmental, and technical support mechanisms for beneficiary households; ii) training of artisans and beneficiaries; iii) communication and outreach; iv) supervision and certification of compliance with multi-hazard resistant standards and of completion of multi-hazard resilient core housing units; v) implementation of the environmental and social management framework including identified safeguard mitigation measures; vi) development of a grievance redress mechanism; and, vii) other enabling activities.

26. Activities under this component will inform operational modalities for the development of the Government's owner-driven housing reconstruction program and are guided by a set of

principles including: i) promotion of multi hazard-resistant construction standards and design; ii) primarily in-situ reconstruction, except where relocation is necessary due to vulnerability of location; iii) owner-driven rebuilding with socio-technical assistance, training, and supervision; iv) utilization of easily accessible and local materials and familiar construction methods; and, v) provision of uniform assistance package as reconstruction assistance in tranches based on certification of stage and quality. In addition, the program design will strive to ensure coordination of multiple reconstruction initiatives and standards for equity; and attempt to link housing to livelihoods and infrastructure rehabilitation. The beneficiary households will be screened and identified through the Earthquake Household Damages and Characteristics (EHDC) Survey first taking place in the 14 most affected districts.

27. Individual Housing Reconstruction Grants will be disbursed in multiple tranches, subject to the satisfactory achievement of pre-identified milestones, verification of progress and compliance with multi-hazard resistant standards. The exact amount of the grant will be determined by the GoN and may be adjusted if needed during implementation. This would be stated in the Operations Manual.

28. The households receiving grants and technical support under this component will be geographically targeted to selected Village Development Committees (VDCs)/Municipalities with rural characteristics, in the affected districts. The VDCs/Municipalities would be selected based on the extent of damages in the village and readiness to implement the project. These criteria would be assessed through the Earthquake Household Damages and Characteristics (EHDC) Survey which would: i) building on the data already collected by District Disaster Relief Committee (DDRC), ascertain the damage to the housing stock at the VDC/Municipality level against uniformly applied engineering criteria; ii) verify household eligibility through the EHDC Survey including willingness to adhere to project guidelines for resilient construction and timelines; and iii) collect information to open bank accounts for affected households (or other assistance transfer mechanism), which will be in the name of the beneficiary, to ensure timely and transparent fund transfers. Final certification of completion of multi-hazard resilient core housing will be carried out in accordance with the Operations Manual.

Component 2: Disaster Risk Management Systems - US\$10 million

29. The objective of this component is to support the GoN in putting in place systems to provide better disaster risk reduction, preparedness, and disaster response, in line with global best practices. The component will finance, as needed, support in the areas of (inter alia) disaster risk management, risk assessment and financing, structural engineering, remote sensing, GIS, land use and zoning, permitting and approval of site and building plans, professional accreditation, curriculum development, building code implementation and enforcement, studies on safety net practices in post-disaster situations, and inclusive and gendered practices in disaster mitigation planning.

Component 3: Project Implementation Support - US\$5 million

30. This component will finance the establishment and operation of the Project Management Unit (PMU), the Project Implementing Units (PIUs), and the District-Level Project Implementation Units (DL-PIUs). This will cover support to strengthening capacity to effectively procure and manage delivery systems including damage assessment, beneficiary household identification, payment system, management information system (MIS), grievance redress, and communication/outreach. In addition, the component will also finance consultancies/service providers required for the preparation and supervision of specific activities, monitoring and evaluation.

31. There is an existing MIS within MoFALD, as well as a manual-based cash transfer system. Pilots on e-payments have been completed by the ministry as well. The implementation support provided through this project would build on these existing systems to improve financial inclusion, transparency and accountability. This would be done through the opening of bank accounts for payments of the reconstruction grants, expanding the MIS, and providing targeted technical assistance for the provision of communications and grievance redress mechanisms. The comprehensive dataset, which would be developed through this project would remain with MoFALD after the project, and assist in building an evidence base for pro-poor policy decisions for both disaster response and mitigation as well as social protection.

Component 4: Contingency Emergency Response - US\$0 million

32. Following an adverse natural event that causes a major natural disaster, the respective governments may request the Bank to re-allocate project funds to support response and reconstruction. This component would draw resources from the unallocated expenditure category and/or allow the Government of Nepal to request the Bank to re-categorize and reallocate financing from other project components to partially cover emergency response and recovery costs. This component could also be used to channel additional funds should they become available as a result of an emergency.

B. Project Financing

Lending Instrument

33. The lending instrument will be Investment Project Financing, and the implementation period will be five years. IDA financing will be made available from the Crisis Response Window (CRW).

C. Project Cost and Financing

Table 1: Finances per Project Component

| Project Components | Total Cost (US\$ M) | IDA Financing (US\$ M) | Financing |
|---|---------------------|------------------------|-----------|
| Component 1: Improved housing reconstruction | 185.0 | 185.0 | 100% |
| Component 2: Disaster risk management systems | 10.0 | 10.0 | |
| Component 3: Project implementation support | 5.0 | 5.0 | |
| Component 4: Contingency emergency response | 0.0 | 0.0 | |

| Project Components | Total Cost (US\$ M) | IDA Financing (US\$ M) | Financing |
|----------------------------|--------------------------------|---------------------------------------|------------------|
| <i>Total</i> | <i>200.0</i> | <i>200.0</i> | |
| <i>Total Project Costs</i> | | <i>200.0</i> | |

D. Lessons Learned and Reflected in the Project Design

34. The proposed project incorporates lessons learned from extensive global experience of the Bank in post-disaster housing reconstruction, in particular Pakistan’s Earthquake Emergency Recovery Credit (ERC) and India’s Gujarat Emergency Earthquake Reconstruction Project (GEERP) given the similar nature of the disasters and context, as well as recent post-disaster projects in India, Haiti, Philippines, and Indonesia.

35. The main lessons learned and incorporated into project design are: i) an owner-driven approach to reconstruction, using locally available materials and incorporating traditional construction methods and designs which are found to be culturally relevant and environment friendly, in conjunction with special disaster resisting features as recommended by the relevant technical codes/guidelines that help improve disaster resilience; ii) avoiding relocation to the extent possible, and respecting social links; iii) a uniform housing reconstruction policy irrespective of the funding sources; iv) transitional sheltering and permanent housing reconstruction strategies should be formulated and disseminated simultaneously; v) housing reconstruction policy to assure implementation of seismic resistance specification, ensure sustainable building material supply chain and to be based on transparent and robust mechanism for financing, implementing, and monitoring; and vi) an effective public information campaign from the outset.

36. Local communities are expected to manage the reconstruction project on the ground. Local governments can leverage their existing structures and programs to facilitate reconstruction. Community members should assist each other in reconstruction: ideally such a program should be empowering in nature, but at the very least it should ensure that it is not leaving vulnerable groups even more disadvantaged. Disasters often present opportunities to enhance gender equity in the response program design.

37. Lessons have been integrated from experiences in other housing reconstruction programs to ensure the technical adequacy of key elements of the program. This includes: i) structural assessments; ii) environmental and social safeguards management; iii) monitoring and evaluation; iv) social protection and cash transfers for housing reconstruction and livelihood restoration and evaluation; v) community awareness building about disaster safety; vi) training of artisans; vii) supporting material supply chains; and, viii) strong grievance redress mechanisms. These lessons have been shared with the government in the aftermath of the disaster through knowledge notes and have been incorporated into the Project’s design.

V. IMPLEMENTATION

A. Institutional and Implementation Arrangements

38. The Government of Nepal (GoN) has overall responsibility for implementing this multi-sectoral and multi-ministerial Project. At the highest level, a Project Management Unit (PMU) will be established within MOF to provide high level oversight and policy decisions on project activities. It is possible that a coordinating agency will be established to be responsible for the general oversight and overall supervision and coordination of the government's reconstruction and rehabilitation efforts, including housing reconstruction. If this does occur, upon its establishment, the Agency could take over the guidance and oversight role of the PMU. For the Agency to take over additional responsibilities, including implementation and financial management, an assessment would have to be carried out in accordance with Bank policies and the project would be restructured, if necessary.

39. Component 1 will be implemented by a dedicated Project Implementing Unit (PIU) in each of the implementing line ministries, MoFALD and MoUD. The MoUD PIU will comprise technical professionals who will lead the technical components of implementation, including technical training, design standards, supply chain management, and others as detailed in the POM.

40. Under the MoFALD PIU, one or more District-Level Project Implementation Units (DL-PIUs) will be established as appropriate, given the geographical scope of implementation, to provide close technical support and supervision to project activities. The DL-PIUs will manage the majority of district level oversight and coordination tasks given their physical proximity to the affected areas. No financial management responsibilities will be carried out by DL-PIUs, VDCs, and Municipalities. At the local/community level, VDCs/Municipalities where the beneficiary households reside will be responsible for the implementation of work on the ground. The results of the EHDC Survey, conducted by the Central Bureau of Statistics (CBS) at the village/community level, will be released to all eligible households. The MoUD PIU will use existing Training Centers and if needed set up additional Training Centers and Technical Assistance support in collaboration with Civil Society Partner Organization (NGOs, private sector, academia, etc.) as service providers, which will be responsible for training master artisan trainers, trainer of trainers, artisans, home-owners, etc. These Training Centers will also have mobile teams which will go from village to village providing technical assistance during reconstruction at various stages.

41. A grievance redress system with clear guidelines about applications and appeals will be developed and launched once the EHDC Survey is underway. The VDCs/Municipalities will be mandated to address all grievances, by calling together a grievance redress committee that will comprise different community members than were involved in identification. If there is disagreement on the result, the beneficiary can appeal to the DDC, where a district level grievance committee will be constituted, and will make the final decision. Grievance mechanisms will be further complemented by defining the role of MoFALD for appeals and by community-based governance mechanisms to enhance social accountability at the local level, which will be in accordance with the Operations Manual. Channels will be developed to allow for community

monitoring and evaluation of the construction process through means such as public hearings or ICT enabled citizen feedback platforms.

42. Activities under each tier (national, district, VDC/Municipality) are all complimentary and it is important that there is a seamless flow of information from both directions so that programs and designs are updated continuously and problems are addressed as soon as they emerge. More details are presented in Annex 3.

B. Results Monitoring and Evaluation

43. Monitoring and Evaluation will be carried out by the MoFALD PIU on the basis of the indicators and milestones developed in the Results Framework (Annex 1). Project monitoring will occur as a periodic function, and will include process reviews/audits, reporting of outputs, and maintaining progressive records as well as third party monitoring and social auditing. Broad thematic areas and activities include the following: i) Social and Environmental Monitoring, ii) Regular Quality Supervision & Certification, iii) Periodic Physical Progress Monitoring & Third Party Quality Audit, and iv) Monitoring and Evaluation.

C. Sustainability

44. The sustainability of the proposed Project is assured through: i) selection of investments based on assessment of damages and needs, ii) institutionalizing the capacity for the necessary maintenance within the GoN’s government structure, independently of the Project, iii) promoting community participation during planning, designing and implementation; and, iv) strengthening/upgrading of traditional building systems for ensuring disaster resilience.

45. Additional specific mechanisms under the Project to support sustainability include: i) involving the community (including women, elderly, landless, youth, differently abled, Indigenous Peoples) in risk mitigation, management and utilizing critical infrastructure; ii) improved design standards for infrastructure; iii) augmenting MoFALD PIU’s capacity as an operational institution; and, iv) adaptation of investments for the minimum disruption of livelihood activities, and their enhancement when feasible for the vulnerable and marginalized groups in the project area.

VI. KEY RISKS AND MITIGATION MEASURES

A. Risk Ratings Summary Table

Table 2: Systematic Operations Risk-Rating Tool (SORT)

| Risk Category | Rating |
|---|---------------|
| 1. Political and governance | S |
| 2. Macroeconomic | L |
| 3. Sector strategies and policies | M |
| 4. Technical design of project or program | S |
| 5. Institutional capacity for implementation and sustainability | S |
| 6. Fiduciary | H |
| 7. Environment and social | S |
| 8. Stakeholders | S |

| Risk Category | Rating |
|----------------------|---------------|
| 9. Other | |
| Overall | S |

Note: H= High; S= Substantial; M= Moderate and L=Low

B. Overall Risk Rating and Explanation of Key Risks

46. The overall risk is rated as ‘Substantial’. The rating is driven by the fragile environment created by this large scale disaster which has caused social and environmental damage as well as weakened institutions and stakeholders. As a result, the environment and social risk is substantial: hundreds of thousands of buildings have collapsed creating massive amounts of rubble that require safe disposal, and affected households have temporarily settled elsewhere or live in precarious conditions and need to be relocated back to their dwellings.

47. Stakeholders, including households, communities, and institutions have weakened due to the earthquake, rendering an owner-driven reconstruction approach more taxing, and the community institutions required to coordinate grievance and reconstruction more fragile. Fiduciary risk is considered high as institutions at the national and local levels may have a harder time controlling fund flows in times of crisis. Measures to mitigate this risk include direct cash transfers into beneficiary bank accounts, and ensuring external third party audits of use of funds.

48. The risk of politicization and benefit capture by local elites is substantial, but mitigated by careful screening of eligibility through the EHDC Survey, through direct mobile and electronic transfers to beneficiaries, and through the establishment of a strong Grievance Redress Mechanism. In addition, Governance risk is also substantial because the GoN is still in the process of devising a national reconstruction program that should align reconstruction efforts from various funding sources in a coherent manner. This risk is mitigated through strong dialogue with the government and donors and processing this project will inform operational modalities for the development of the government’s overall housing reconstruction program.

49. Meanwhile, macroeconomic, sector and implementation risks are less than substantial given the relatively stable economic trends Nepal has established in the recent past with a strengthening policy environment for disaster risk management and construction.

50. The likelihood of political instability risk materializing is substantial, and the severity of impact on achieving the project development objective remains substantial. However, the Nepalese authorities demonstrated during the PDNA process and first relief and response phase after the earthquake that they are able to take critical decisions in a relatively timely manner. Implementation risks for this project are mitigated through demonstrated commitment at the highest levels of the government and bureaucracy and through close alignment with other donors, as well as through continued policy dialogue. To continue to mitigate political uncertainty to the extent possible, the Bank actively engages with leaders across the political spectrum to confirm multiparty support for continuing financial sector reforms.

51. Mitigation measures are incorporated to provide additional resources and training to the implementing agencies’ staff including providing external resources specifically to manage and address the following: i) social and environmental safeguard issues with dedicated specialists to

oversee such risks; ii) ensure community participation in design and implementation; iii) capacity augmentation towards planning, designing and managing constructions to supplement the inherent owner capacity to rebuild; and iv) procurement and financial management, including the management of funds through electronic direct cash transfers to beneficiary bank account.

VII. APPRAISAL SUMMARY

A. Economic Analysis

52. The direct beneficiaries of the Project are the members of approximately 55,000 participating households whose homes were destroyed in the earthquake. An economic analysis was performed to assess the rate of return of capital investments needed for the reconstruction and recovery from the earthquake. Since it is difficult to make any assessment of benefits from resilient housing in terms of protection from future such earthquake, the analysis here takes a more straightforward approach of calculating the returns to the households living in a resilient home and staying out of poverty compared to them not receiving any benefits to jump-start their post-disaster life. The main benefit component of this project is the shadow annualized rental income from the newly built multi-hazard resilient housing units. We find the project to have the internal rates of return (IRR) of 21.2 percent and net present value (NPV) of US\$265.0 million, with the benefit costs ratio (BCR) of 1.8. Both the internal rates of return and net present value of the benefits to the affected households show that the project is economically viable by conservative estimates. More details are presented in Annex 5.

B. Technical

53. The Housing Reconstruction includes the provision of housing grants to participating household beneficiaries in targeted areas. Core housing units will be planned and built as per relevant official technical housing reconstruction guidelines that will be developed for the project, in line with Nepali standards, for ensuring the multi-hazard resilience taking into account local weather patterns, especially rainfall, as well as site safety against floods, earthquake and landslides. These technical guidelines will cover the most popular building construction technologies and locally available construction materials that are used in different parts of the country to ensure that the beneficiaries are likely to use them and have access to critical inputs.

C. Financial Management, Disbursement and Procurement

54. It is possible that a coordinating agency will be established to be responsible for the general oversight and overall supervision and coordination of the government's reconstruction and rehabilitation efforts, including housing reconstruction. If this does occur, upon its establishment, the Agency could take over the role of the PMU. For the Agency to take over additional responsibilities, including implementation and financial management, an assessment would have to be carried out in accordance with Bank policies and the project would be restructured, if necessary. As currently designed, MoUD and MoFALD are the implementing agencies and they have the advantage of prior experience in implementation of IDA funded projects. Based on this past experience, the MoUD and MoFALD need to strengthen in the areas of timely financial

reporting and internal auditing. This would be reviewed during project implementation. There are no overdue audit reports in respect of the two agencies.

55. Considering the complexity and number of implementing agencies/cost centers involved, there is a risk in coordination. The major role for overall coordination on Financial Management should be the responsibility of PMU. The coordination will be also required at various levels of the project implementation. The detailed mechanism for coordination and clarity on roles & responsibilities at different levels will be stated in the POM.

56. As there will be large number and volume of cash transfers to beneficiaries, there should be a robust internal control system to ensure that grants have been paid to intended beneficiaries. The required procedures on internal controls will be specified in POM. The detailed FM implementation arrangement is provided in Annex 3.

57. Procurement for the Project will be carried out in accordance with the World Bank's "Guidelines: Procurement of Goods, Works and Non-consulting Services under IBRD Loans and IDA Credits and Grants by World Bank Borrowers" published by the World Bank in January 2011, revised July 2014 ("Procurement Guidelines"), in the case of goods, works and non-consulting services; and "Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits and Grants by World Bank Borrowers" published by the World Bank in January 2011, revised July 2014 ("Consultant Guidelines") in the case of consultants' services, and the provisions stipulated in the Legal Agreement. For each contract to be financed under the Credit, procurement methods or consultant selection methods, the estimated costs, prior review requirements, and time frame will be agreed between the Borrower and the Bank in the Procurement Plan. The Procurement Plan will be updated at least annually or as required to reflect the actual project implementation needs and improvements in institutional capacity.

58. The Project has been triggered by emergency situation (OP 10.00) and therefore, paragraph 20 of OP 11.00 procurement under emergency situation using simplified procurement procedures shall apply. Further details are provided in Annex 3.

59. The procurement activities will be carried out mainly by the PIUs within MoUD and MoFALD and the identified departments under these ministries such as DUDBC and others. While these agencies are currently implementing several Bank financed projects and some staff working in these agencies are familiar with World Bank procurement procedures, many others will need training including those coming through a staff transfer process. The Bank will provide training, workshops and handholding support whenever possible to build the capacity of the GoN. Simultaneously, the Project will plan and provide procurement and other relevant training to project staff on a regular basis for effective project implementation.

60. A rapid procurement capacity assessment of the implementing agencies has been done based on the observation of procurement performance of those agencies under the ongoing Bank financed projects, post review findings and interaction/ interview with the officials currently involved in the ongoing Bank financed projects. While the system in general looks fairly good, given the presence of multiple implementing agencies, simplified procurement procedures and lack of familiarity and proper controls, it is likely that certain contractual terms and conditions

may not be observed or applied properly. Therefore, the risk for this Project has been rated accordingly and aligning with the FM risk and the final integrated fiduciary risk is reflected in the project data sheet and Annex 3. Procurement activities are elaborated in Annex 3.

D. Social (including Safeguards)

61. The project is expected to contribute to positive social benefits in targeted communities, particularly the vulnerable communities, including the poor, women, indigenous peoples (IPs), and Dalits, etc. The housing component of the project has been envisaged to respond to the reconstruction needs of the targeted communities to new, improved and resilient housing. There are various indigenous communities residing in the targeted communities who would receive benefits. The project is designed to ensure timely, adequate and appropriate dissemination of project information, and their full participation in the program design and implementation. The project may include some relocation due to possible relocation of settlements/ households that are in high risk zones. To minimize potential involuntary resettlement impact, it is encouraged to use public land. Moreover, land donation from landlords will be also encouraged, in accordance with cultural norms and historical experience. Due to the nature and scale of the project activities, involuntary resettlement impact is expected to be quite limited. Therefore the project triggers OP 4.10 on Indigenous Peoples and OP 4.12 on Involuntary Resettlement.

62. In line with OP 10.00 and the guidance note for crises and emergency operations for application of IDA safeguards and Public disclosure policies, a Safeguard Action Plan (SAP) has been prepared (see Annex 6). In accordance with the SAP, the GoN is in the process of preparing an Environmental and Social Management Framework (ESMF) to: i) guide the identification of possible social and environmental issues; ii) develop mechanisms to comply with relevant GoN's and World Bank's policy requirements; iii) lay out the approach and procedures relevant during subproject the planning and implementation to mitigate the potential environmental and social impacts of the proposed investments and incorporate enhancement measures where relevant and feasible; and, iv) describe the institutional and implementation arrangements, the monitoring mechanisms, and the capacity building needs for effective implementation of the ESMF. A Resettlement Policy Framework (RPF) and an Indigenous People's Planning Framework (IPPF) will be prepared by the GoN. The RPF will clarify resettlement principles, organizational arrangements and design criteria to be applied to housing reconstruction to be prepared during the project implementation. The IPPF will outlines procedures to ensure free, prior, and informed consultation with affected IP communities, as well as institutional arrangements, monitoring arrangements and disclosure arrangements. The ESMF, RPF and IPPF will be submitted to the Bank for review and clearance. The adoption and disclosure of these framework instruments, in form and substance satisfactory to the Bank, will be included as a condition for the disbursement of housing grants to participating households under the project. The ESMF, IPPF, and RPF will be disclosed locally in the country as well as in the Bank's Infoshop.

E. Environment (including Safeguards)

63. Environmental impacts of the project are related to Component 1 (Housing Reconstruction). The houses will be small and residential, and will be constructed by the owner in-situ (mostly rebuilt in the same land where the previous house was, or in an adjacent land owned

by the recipient). The civil works will be small scale, largely labor-based, site-specific, and will take place at different locations in large geographical area. Therefore, significant environmental impact is not anticipated. There are protected areas/ buffer zones, and forests within a large geographical area/ varied topography in which project activities will take place. The hills/ mountains are generally fragile and vulnerable to landslides and erosion. Hence, moderate to minor environmental risks include likely increased pressure in the forests (community/ government managed and protected area buffer zones) for timber and other resources. Local extraction of construction material (sand, gravel, clay) may also increase vulnerability to landslides and soil erosion. Small scale construction works have minor risks related to health & safety. The project can also contribute positively by promoting 'build back better' through integration of resilient and innovative ideas/ technologies for constructing rural homes, on case by case basis, e.g. safe location, earthquake resistance structure, smokeless stove, water harvesting, re-use of salvaged material, solar & other alternative energy, etc.

64. As mentioned above and in Annex 6, a SAP that provides a roadmap for preparation of safeguards instruments has been developed, and the preparation of the ESMF to ensure identification and management of environmental issues and risks relating to project implementation is currently underway. The ESMF will be reviewed and agreed by the IDA as a disbursement condition for the release of any housing grant under component 1.

F. World Bank Grievance Redress

65. Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing project-level grievance redress mechanisms or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit www.worldbank.org/grs. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

Annex 1: Results Framework and Monitoring

Country: Nepal

Project Name: Nepal Earthquake Housing Reconstruction Project (P155969)

Results Framework

Project Development Objectives

PDO Statement

The Project Development Objective (PDO) is to restore affected houses with multi-hazard resistant core housing units in targeted areas and to enhance the government's ability to improve long-term disaster resilience.

These results are at | Project Level

Project Development Objective Indicators

| Indicator Name | Baseline | Cumulative Target Values | | | | | |
|---|----------|--------------------------|--------|--------|--------|--------|------------|
| | | YR1 | YR2 | YR3 | YR4 | YR5 | End Target |
| Households with resilient core housing reconstructed under the project (Number) | 0.00 | 0 | 16,980 | 28,300 | 53,770 | 55,000 | 55,000 |
| Out of which women headed households (Number - Sub-Type: Supplemental) | 0.00 | 0 | 4,415 | 7,358 | 13,980 | 14,300 | 14,300 |
| Citizens made aware of earthquake resilient reconstruction (Number) | 0.00 | 15,436 | 30,873 | 55,000 | 55,000 | 55,000 | 55,000 |
| Government officials trained on Disaster Risk Management | 0.00 | 15 | 50 | 100 | 150 | 250 | 250 |

| | | | | | | | |
|----------|--|--|--|--|--|--|--|
| (Number) | | | | | | | |
|----------|--|--|--|--|--|--|--|

Intermediate Results Indicators

| Indicator Name | Baseline | Cumulative Target Values | | | | | |
|---|----------|--------------------------|---------|---------|---------|---------|------------|
| | | YR1 | YR2 | YR3 | YR4 | YR5 | End Target |
| Direct project beneficiaries (Number) - (Core) | 0.00 | 0 | 73,693 | 122,822 | 233,362 | 236,500 | 236,500 |
| Female beneficiaries (Percentage - Sub-Type: Supplemental) - (Core) | 0.00 | 50 | 50 | 50 | 50 | 50 | 50 |
| Intended beneficiaries aware of project info. and project investments (%) (Percentage) - (Core) | 0.00 | 30 | 60 | 70 | 80 | 100 | 100.00 |
| Intended beneficiaries - male (number) (Number - Sub-Type: Supplemental) - (Core) | 0.00 | 118,250 | 118,250 | 118,250 | 118,250 | 118,250 | 118,250 |
| Intended beneficiaries - female (number) (Number - Sub-Type: Supplemental) - (Core) | 0.00 | 118,250 | 118,250 | 118,250 | 118,250 | 118,250 | 118,250 |
| Intended beneficiaries aware of project info. and project investments –male (Number - Sub-Type: Supplemental) - (Core) | 0.00 | 35,475 | 70,950 | 82,775 | 94,600 | 118,250 | 118,250 |
| Intended beneficiaries aware of project info. and project investments - female (Number - Sub-Type: Supplemental) - (Core) | 0.00 | 35,475 | 70,950 | 82,775 | 94,600 | 118,250 | 118,250 |

| | | | | | | | |
|---|------|--------|--------|--------|--------|--------|--------|
| Grievances registered related to delivery of project benefits addressed (%) (Percentage) - (Core) | 0.00 | 90 | 90 | 95 | 95 | 95 | 95 |
| Grievances related to delivery of project benefits that are addressed-(number) (Number - Sub-Type: Supplemental) - (Core) | 0.00 | 390 | 1,755 | 1,950 | 2,145 | 2,145 | 2,145 |
| Improved houses reconstructed under the project (Number) | 0.00 | 0 | 16,980 | 28,300 | 53,770 | 55,000 | 55,000 |
| Artisans trained in multi-hazard resistant construction (Number) | 0.00 | 15,000 | 30,000 | 60,000 | 60,000 | 60,000 | 60,000 |
| Technical studies on disaster risk management completed (Number) | 0.00 | 0 | 0 | 0 | 1 | 3 | 3.00 |

Indicator Description

Project Development Objective Indicators

| Indicator Name | Description (indicator definition etc.) | Frequency | Data Source / Methodology | Responsibility for Data Collection |
|---|--|-------------|---------------------------|------------------------------------|
| Households with resilient housing reconstructed under the project | Number completed houses of households that received project financial and technical assistance, with multi-hazard resilient features. | Semi-annual | Project's MIS | MoFALD |
| Out of which women headed households | Number of houses reconstructed of women headed households | Semi-annual | Project's MIS | MoFALD |
| Citizens made aware of earthquake resilient reconstruction | Number of participants to sessions at training centers | Semi-annual | Project's MIS | MoUD and MoFALD |
| Government officials trained on Disaster Risk Management | Number of government officials having received training, and/or participated in exposure visits and conferences on disaster risk management topics financed by the Project | Semi-Annual | Project progress reports | MoUD |

Intermediate Results Indicators

| Indicator Name | Description (indicator definition etc.) | Frequency | Data Source / Methodology | Responsibility for Data Collection |
|------------------------------|---|-------------|---------------------------|------------------------------------|
| Direct project beneficiaries | Direct beneficiaries are people or groups who directly derive benefits from an intervention (i.e., children who benefit from an immunization program; families that have a new piped water connection). Please note that this indicator requires supplemental information. Supplemental Value: Female beneficiaries (percentage). Based on the assessment and definition of | Semi-annual | Project's progress report | MOF |

| | | | | |
|--|---|-------------|------------------------------------|-----|
| | direct project beneficiaries, specify what proportion of the direct project beneficiaries are female. This indicator is calculated as a percentage. | | | |
| Female beneficiaries | Based on the assessment and definition of direct project beneficiaries, specify what percentage of the beneficiaries are female. | Semi-annual | Project's progress report | MOF |
| Intended beneficiaries aware of project info. and project investments (%) | This indicator intends to measure the effectiveness of consultation and communication mechanisms in terms of ensuring that information about the project and project supported investments have been communicated effectively. | Annual | Project's progress reports | MOF |
| Intended beneficiaries - male (number) | No description provided. | Annual | Project's progress reports | MOF |
| Intended beneficiaries - female (number) | No description provided. | Annual | Project's progress reports | MOF |
| Intended beneficiaries aware of project info. and project investments –male | No description provided. | Annual | Project's progress reports | MOF |
| Intended beneficiaries aware of project info. and project investments - female | No description provided. | Annual | Project's progress reports | MOF |
| Grievances registered related to delivery of project benefits addressed (%) | This indicator measures the transparency and accountability mechanisms established by the project so the target beneficiaries have trust in the process and are willing to participate, and feel that their grievances are attended to promptly. It is understood that local sensitivities and tensions will not allow grievance or | Semi-annual | Project's progress report, and GRM | MOF |

| | | | | |
|--|---|-------------|------------------------------------|--------|
| | redress mechanisms to be established in all projects. | | | |
| Grievances related to delivery of project benefits that are addressed-(number) | This indicator measures the transparency and accountability mechanisms established by the project so the target beneficiaries have trust in the process and are willing to participate, and feel that their grievances are attended to promptly. It is understood that local sensitivities and tensions will not allow grievance or redress mechanisms to be established in all projects. | Semi-annual | Project's progress report, and GRM | MOF |
| Improved houses reconstructed under the project | Number of houses with multi-hazard resilient features reconstructed through owner-driven mechanism supported by the project | Semi-Annual | Project's MIS | MoFALD |
| Artisans trained in multi-hazard resistant construction | Number of artisans that received training on multi-hazard resilient housing reconstruction | Semi-Annual | Project's progress report | MoUD |
| Technical studies on disaster risk management completed | Number of technical studies completed under the Project under the capacity building component | Annual | Project's progress report | MoUD |

Annex 2: Detailed Project Description

NEPAL: Earthquake Housing Reconstruction Project

Component 1: Housing Reconstruction- US\$185 million

1. The component will finance: (a) the provision of *housing grants* for reconstruction of approximately 55,000 multi-hazard resilient core housing units. Eligibility will be determined by an assessment of recovery needs, and willingness to participate and adhere to project guidelines for resilient construction, quality standards and timelines; and (b) the establishment of a program of owner-driven housing reconstruction in targeted areas including: i) social, environmental, and technical support mechanisms for beneficiary households; ii) training of artisans and beneficiaries; iii) communication and outreach; iv) supervision and certification of compliance with multi-hazard resistant standards; v) implementation of the environmental and social management framework including identified safeguard mitigation measures; vi) development of a grievance redress mechanism; and, vii) other enabling activities.

2. Activities under this component will inform operational modalities for the development of the Government's owner-driven housing reconstruction program and are guided by a set of principles including: i) promotion of multi hazard-resistant construction standards and design; ii) primarily in-situ reconstruction, except where relocation is necessary due to vulnerability of location; iii) owner-driven rebuilding with socio-technical assistance, training, and supervision; iv) utilization of easily accessible and local materials and familiar construction methods; and, v) provision of uniform assistance package as reconstruction assistance in tranches based on certification of stage and quality. In addition, the program design will strive to ensure coordination of multiple reconstruction initiatives and standards for equity; and attempt to link housing to livelihoods and infrastructure rehabilitation. The beneficiary households will be screened and identified through the Earthquake Household Damages and Characteristics (EHDC) Survey first taking place in the 14 most affected districts.

3. Individual Housing Reconstruction Grants will be disbursed in multiple tranches, subject to the satisfactory achievement of pre-identified milestones, verification of progress and compliance with multi-hazard resistant standards. The exact amount of the grant will be determined by the GoN and may be adjusted if needed during implementation. This would be stated in the Operations Manual.

4. The households receiving grants and technical support under this component will be geographically targeted to selected Village Development Committees (VDCs)/Municipalities in the affected districts. The VDCs/Municipalities would be selected based on the extent of damages in the village and readiness to implement the project. These criteria would be assessed through the Earthquake Household Damages and Characteristics (EHDC) Survey which would: i) ascertain the damage to the housing stock at the VDC/Municipality level against uniformly applied engineering criteria; ii) verify household eligibility through the EHDC Survey including willingness to adhere to project guidelines for resilient construction and timelines; and iii) collect

information to open bank accounts for affected households (or other assistance transfer mechanism), which will be in the name of the beneficiary, to ensure timely and transparent fund transfers.

Mobilization phase: development of Institutional arrangements, policies and assistance criteria

A. Developing of a uniform housing reconstruction program policy covering eligibility, amount, form of payment, land issues

5. A system of very clear eligibility criteria will be developed and communicated to encourage households find appropriate building material and start reconstruction quickly. A set of uniform eligibility criteria will be applied and periodically tested to ensure quality of the system. Having a well-defined process will ensure transparency, equitability and accountability.

B. Formulating and disseminating transitional shelter and permanent housing reconstruction strategies simultaneously

6. In consultation with the Government of Nepal a holistic transitional and permanent reconstruction strategy will be formulated and disseminated together at the same time. This will ensure that material assistance for transitional housing will eventually be reused in the reconstruction of permanent housing.

7. In consultation with the Government of Nepal, Nepalese construction material suppliers and manufacturers, and other development partners, a system for a material procurement and supply chain hub will be developed and facilitated by the government, to improve market access in remote locations.

C. Public information campaign and awareness

8. Early and effective communication is crucial to ensure the credibility of the project and wider housing reconstruction program. The communication will support large scale distribution of simple leaflets, advertisements in newspapers, through cell phone using simple SMSs, visuals, videos, social media platforms, use of radio as it remains the most reliable with deep penetration into affected areas along with use of state and private television.

9. Multi-hazard resistant construction methodologies will be promoted and design templates will be provided. Ideal construction practices such as building toilets, constructing easily upgradable shelters etc. will be encouraged. Simple and practical engineering solutions such as use of bracing in wall framing, proper drainage of the construction sites etc. will be well communicated at an early stage.

Preconstruction phase: Earthquake Household Damages and Characteristics Survey, preparation of multi-hazard resistant designs, and capacity building

A. Earthquake Household Damages and Characteristics Survey

10. Experiences in post-disaster recovery have underlined the critical importance of building level damage and household survey. A single comprehensive assessment is necessary to ascertain the damage to the building/ housing stock against uniformly applied engineering criteria, and to verify the eligibility of beneficiaries. Such surveys also play a significant role in reassuring the public (by reducing their uncertainty about the future), ensuring public safety (against the risk of compromised buildings), assisting with the social and economic recovery (by encouraging the reoccupation of safe buildings, supporting recovery planning (by providing the essential data to formulate and budget recovery plans), supporting the implementation and monitoring of recovery (by linking assessments to follow-up recovery actions by households), and promoting long-term risk reduction (by informing the development of resilient reconstruction practices).

11. This comprehensive EHDC Survey builds on the ongoing Rapid Visual Damage Assessment work being carried out under the guidance of Department of Urban Development and Building Construction (DUDBC). This project will adopt and scale up the assessment methodology as necessary.

12. The main objectives of the EHDC survey are: to ascertain the complete scope of damages to the housing stock; ascertain the list of beneficiaries to receive housing recovery assistance, in a manner that is uniform, equitable and inclusive; ascertain site safety to ensure that rebuilding at a specific site is safe and promote public reassurance that recovery is under way.

13. The overall EHDC survey methodology and forms will be developed for damages, tenure and household status verifications, and site conditions. This activity may be financed under the project but alternate sources of funding are also being explored. The final decision on financing source will also be included as part of the POM.

14. A Participation Agreement form will be developed, outlining the compliance requirements to be eligible for the release of tranches (e.g. holding/opening a bank account, reconstructing following multi-hazard resistant practices etc.) to be signed by beneficiary households who opt to participate in the Project and government representative. It will also include the number and size and conditions for each tranche, total size of the grant, the commitment to complete housing units before project closing date. The first tranche will be released upon the beneficiary's signing of the Participation Agreement.

15. Assessment teams will be mobilized, trained and equipped to ensure the quality of data. This will require agreeing on composition of assessment teams, mobilizing hundreds of small teams and providing training. A cascading training program will be delivered and tested in partnership with civil society organizations, NGOs, private sector, academia, etc. Teams will be provided with all necessary equipment including electronic GPS enabled survey recording devices and logistic support.

B. Multi-hazard resistant housing solutions

16. A menu of housing design templates and construction procedures will be made available to the affected communities so that reconstructed houses are multi-hazard resistant. These designs

and constructions techniques will be aligned with local construction practices for ease of adoption. In spite of these differences, the housing grant under the Project will be equivalent across all beneficiaries. Basic ingredients of the design of the core housing unit will include multi-hazard safety aspects and thereby certain essential features in the construction, area of house, layout, and material of construction, etc. Flexibility of expansion beyond the core house will ensure effective participation and ownership.

C. Training

17. Given the scale of reconstruction required, there is a need to train a large number of local artisans. Therefore training materials and curricula will be developed for various target groups of local artisans such as masons, carpenters, steel-fixers, etc. The training will focus on introducing multi-hazard resistant construction techniques. Model houses and demonstration structural details will be set up as part of the training. Training Centers and Technical Assistance support will be set up in collaboration with civil society partner organizations/service providers (NGOs, private sector, academia, etc.), which will be responsible for training master artisan trainers, trainer of trainers, artisans, home-owners, etc. These Training Centers will also have mobile teams which will go from village to village providing technical assistance during reconstruction of various stages.

D. Facilitate building material markets

18. Scaling up material supply chains will be important to counter potential shortages in availability of building materials, price increases and difficulties in accessing materials in remote areas (leading to high transportation costs). In consultation with the GoN, the private sector will be engaged to restart the building materials supply chain and materials hubs. This will ensure consistent and fair-priced supply of required materials across the affected area. The hubs will be an expansion of the existing private sector so that they do not distort markets and will be facilitated by the government. If feasible, existing organizations can be leveraged to organize bulk-purchase and material banks.

E. Disseminate information on subsidy, eligibility, and criteria for losing eligibility

19. A sustained communication program will be set in place to disseminate information on subsidy, eligibility and criteria. The objective is to avoid misinformation and minimize potential grievances.

Implementation phase: cash grants, reconstruction, quality control and monitoring

A. Cash Grants

20. A multi-tranche grant payment mechanism will be developed that is closely tied to stage of construction as well as the inspection and certification. The tranches will be disbursed through the banking system and direct electronic transfers to the beneficiaries. The first tranche would be released upon beneficiary verification and signing of the Participation Agreement whereby the

beneficiary opts to participate in the project. The beneficiary would commit to the use of grant proceeds in accordance with the housing reconstruction guidelines, including the architectural standards, technical and earthquake resistant specifications, environmental and social safeguards standards etc. Subsequent releases would be dependent upon them meeting reconstruction criteria and satisfactory achievement of pre-agreed milestones. This process will require tying up with commercial banks and/or other financial entities and mobile companies to facilitate smooth transfer of grants.

B. Housing Reconstruction

21. Housing reconstruction will follow the disaster-resilient housing solutions, which will include models and a menu of options for beneficiaries to adapt to their respective conditions. Demonstration activities will be organized and model houses built in places where most beneficiaries can have access.

C. Monitoring and Evaluation

22. A strong management, reporting, monitoring, and evaluation system will be in place to monitor, standardize and compile all data streams related to reconstruction data, multi-hazard resilience compliance, and technical support activities. This will provide key outcomes and the information will be used for analysis, planning, and course corrections. Clear mechanisms will be set in place to monitor effectiveness of various activities, in order to rapidly iterate to increasingly effective strategies (example: improving training programs over time).

23. This monitoring and evaluation system will be built upon the information collected during the EHDC survey.

24. The management plan will ensure that all aspects of the reconstruction are being monitored and reported, that responsibilities are clear, and that appropriate levels of information are shared with government, the community, beneficiaries, etc. A robust IT system will be set in place to support the various databases and data streams. The comprehensive EDHC survey will serve as the first critical piece of that data.

Component 2: Disaster Risk Management Systems- *US\$10 million*

25. The objective of this component is to support the GoN in strengthening their overall capacity towards better disaster risk reduction, preparedness, and disaster response, in line with global best practices. The component will finance, as needed, consultancies, training, and exposure visits to support the areas of inter alia: disaster risk management, risk assessment and financing, structural engineering, remote sensing, GIS, land use and zoning, permitting and approval of site and building plans, professional accreditation, curriculum development, building code implementation and enforcement, studies on safety net practices in post-disaster situations, inclusive and gendered practices in disaster mitigation planning,

Component 3: Project Implementation Support - *US\$5 million*

26. This component will finance the establishment and operation of the Project Management Unit (PMU), the Project Implementing Units (PIUs), and the District-Level Project Implementation Units (DLPIUs). This will cover support to strengthening the capacity to effectively procure and manage delivery systems including damage assessment, beneficiary household identification, payment system, management information system (MIS), grievance redress, and communication/outreach. In addition, the component will also finance consultancies/service providers required for the preparation and supervision of specific activities, monitoring and evaluation.

27. There is an existing MIS within MoFALD, as well as a manual based cash transfer system. Pilots on e-payments have been completed by the ministry as well. The implementation support provided through this project would build on these existing systems to improve financial inclusion, transparency and accountability. This would be done through the opening of bank accounts for payments of the reconstruction grants, expanding the MIS, and providing targeted technical assistance for the provision of communications and grievance redress mechanisms. The comprehensive dataset, which would be developed through this project would remain with MoFALD after the project, and assist in building an evidence base for pro-poor policy decisions for both disaster response and mitigation as well as social protection.

Component 4: Contingency Emergency Response - *US\$0 million*

28. Following an adverse natural event that causes a major natural disaster, the respective governments may request the Bank to re-allocate project funds to support response and reconstruction. This component would draw resources from the unallocated expenditure category and/or allow the Government of Nepal to request the Bank to re-categorize and reallocate financing from other project components to partially cover emergency response and recovery costs. This component could also be used to channel additional funds should they become available as a result of an emergency.

Annex 3: Implementation Arrangements

NEPAL: Earthquake Housing Reconstruction Project

A. Project Institutional and Implementation Arrangements

1. The Government of Nepal (GoN) has overall responsibility for implementing this multi-sectoral and multi-ministerial Project. At the highest level, it is expected that a Project Management Unit, within MOF, including a Project Director responsible for supervising the Project, will be responsible for providing policy guidance, coordination, and exercise general oversight of the implementation of Project activities and of its broader functions in overseeing the reconstruction process.
2. Beneath the PMU, MoUD would be responsible for providing technical inputs to oversee housing reconstruction, while MoFALD would be the implementing agency for the provision of the housing grants. The project will include a Project Implementing Unit (PIU) located in each Ministry under the overall supervision of the PMU. The PIUs would be overseen by the Project Director in the PMU and be led by a Project Coordinator, one for each PIU.
3. Each PIU will include a dedicated Accounts Officer and a Procurement Officer who will pull resources/consultants when required from the system when specific procurement support is required. The PIU in MoFALD will deliver housing grants through bank accounts.
4. The MoUD under the guidance of the PMU, will focus on technical aspects of housing reconstruction, setting up standards, and technical quality control of the reconstruction effort.
5. The MoFALD's main responsibility will include operationalizing the assistance and inspection activities. MoFALD will also develop a reliable cash transfer mechanism to the beneficiaries. The mechanism should ensure that the process is transparent and not vulnerable to misuse. MoFALD will also be responsible for housing the MIS, and overseeing grievance and communications mechanisms.
6. At the affected districts level, District-Level Project Implementation Units (DLPIUs) will be established to provide close technical support and supervision to the districts within their respective geographical remit. DL-PIUs will manage the majority of district level oversight and coordination tasks given their physical proximity to the affected areas. The responsibility of the DL-PIUs will include, among other things: i) review and recommend annual work plans of the districts, ii) oversight of district reconstruction/service providers; iii) monitoring of district programs and projects; iv) coordination with partner organizations and district reconstruction hubs; and v) reporting to the PIUs under the coordinating ministries (MoFALD and MoUD). Each DL-PIU will consist of the following internal units: i) a technical section to oversee the planning, preparation, implementation, and quality of social and technical support to owners; and ii) a fiduciary and safeguards section to oversee compliance with the Project's ESMF, RPF, and IPPF, and fiduciary arrangements.

7. Each DL-PIU will be led by a Project Coordinator (PC), a mid- or senior-level official of the concerned implementing line ministry having at least 10 years of work experience in the relevant field/area. Each DL-PIU shall consist of: a PC for planning and management; a Deputy/Assistant Project Coordinator (DPC/APC) for administration and governance; a DPC/APC for financial management, budgeting and accounts; a DPC/APC for procurement and contract management; and a DPC/APC for monitoring and evaluation (M&E). Personnel to be required for DPIUs will be identified from respective ministries as soon as possible and provided with necessary training. FM arrangements including FM staffing is included as a disbursement condition under category 2, to ensure satisfactory arrangements are in place before the disbursement of housing grants.

8. At the local/community level, Village Development Committees (VDCs) and Municipalities targeted under the Project will be responsible for the oversight of work on the ground. Funding will be released to all participating households based on the results of the EHDC survey. The main responsibilities of the VDC/Municipalities, among other things, include: i) coordinating with partner organizations/service providers; and ii) serving as a first interface for grievance redress.

9. Activities under each tier (national, district, VDC/Municipality) are all complimentary and it is important that there is a seamless flow of information from both directions so that programs and designs are updated continuously and problems are addressed as soon as they emerge. The work relationship between these three tiers and the implementation arrangements are summarized below:

10. Selection of VDCs/Municipalities targeted under the Project: The PMU, in consultation with the Bank, will develop a uniform set of criteria for selecting affected districts that will be supported by this Project. The selection of districts will be carried out based on initial Post Disaster Needs Assessment (PDNA) results and in close collaboration with the MoUD and MoFALD. Once potential districts are identified, a more detailed recovery assessment will be carried out to identify eligible beneficiaries. This selection is relayed back to the PIUs under the two ministries and the PMU for final approval.

11. Developing design options: The PMU with support from MoUD (DUDBC) will be responsible for convening national and international experts and overseeing the development of multi-hazard resistant design solutions. These solutions will include full consideration to cultural preferences, climate, terrain, and safety features. Sufficient design options will be developed at this stage to maximize adoptability and minimize non-compliance. The designs will be reviewed by a panel of separate experts. The proposed preliminary designs will be presented to DDCs and VDCs/Municipalities and their feedback will be incorporated into the final designs. The design options will be developed in a way that the DDCs will have room to further customize the designs during the reconstruction period based on the availability of materials and feedbacks from beneficiaries.

12. Training: A cascading training program will be implemented as an integral part of the reconstruction effort. At the national level, a common reconstruction training curricula will be developed. This will ensure that the minimum building standards approved by the PMU will be

implemented across the affected areas. In addition, at the national level, master trainers will be trained who in turn will train mobile-teams that go to individual VDCs/Municipalities and train artisans and contractors who will directly be involved in the reconstruction. Training Centers and Technical Assistance support will be set up in collaboration with partner organizations (NGOs, private sector, academia, etc.), which will be responsible for training master artisan trainers, trainer of trainers, artisans, home-owners, etc.

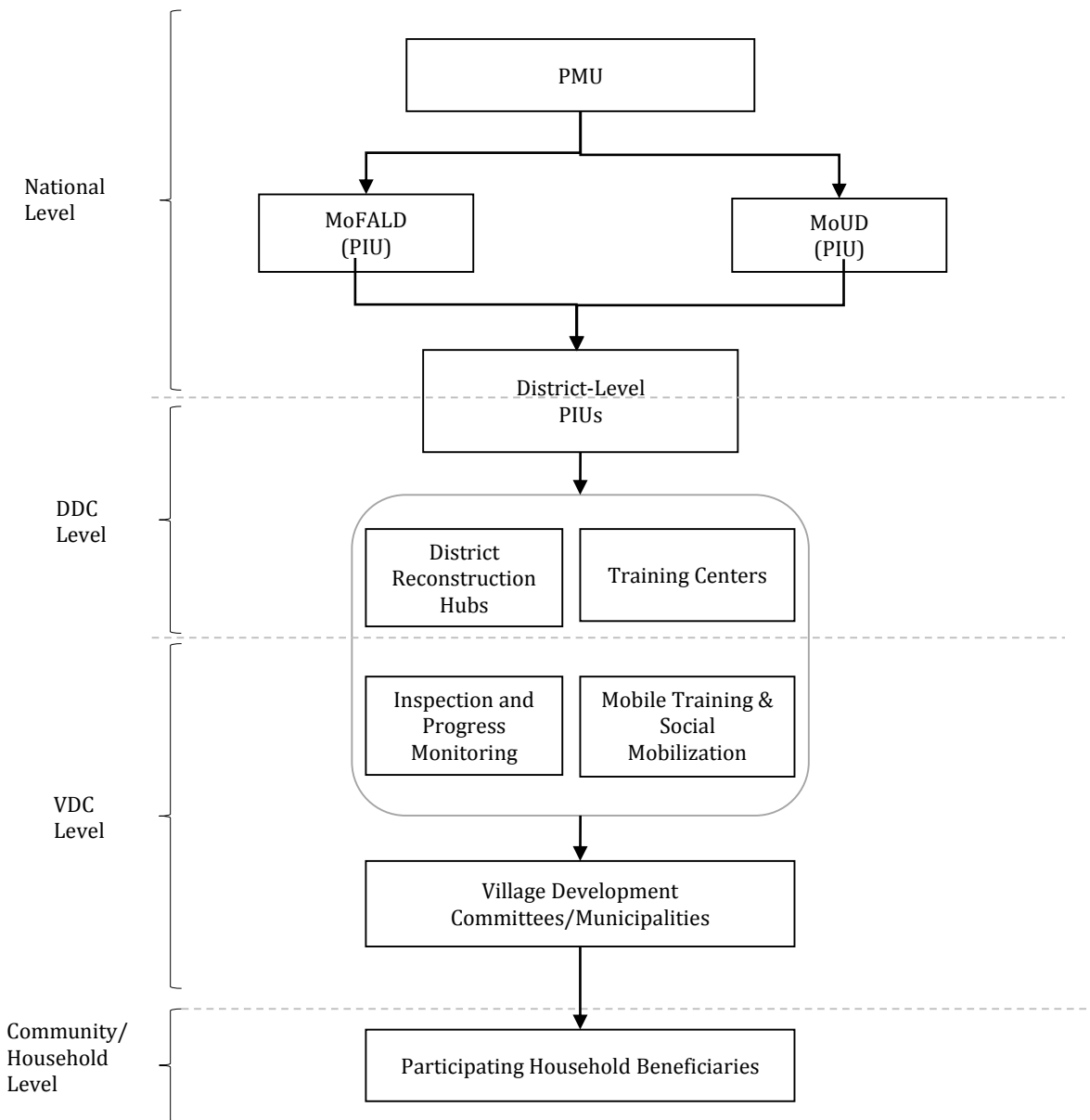
13. Inspection and progress monitoring: It is expected that there will be a degree of non-compliance due to many reasons such as poor communication of requirements, inconsistency between proposed design and locally available material, weak coordination etc. To address this problem and to ensure overall quality of construction, MoFALD will develop a uniform inspection and progress monitoring criteria and system, in consultation with DDC and VDC/Municipality representatives. This system will be used for quality control and to measure progress for payment purposes.

14. Grievance redress: A grievance redress system with clear guidelines about applications and appeals will be developed before the MoFALD will disclose the list of eligible household beneficiaries. The VDCs/Municipalities will be mandated to address all grievances, by calling together a grievance redress committee that will comprise different community members than were involved in identification. If there is disagreement on the result, the beneficiary can appeal to the DDC, where a district level grievance committee will be constituted, and will make the final decision. Grievance mechanisms will be further complemented by defining the role of MoFALD for appeals and community-based governance mechanisms to enhance social accountability at the local level in accordance with Operations Manual. Channels will be developed to allow for community monitoring and evaluation of the construction process through means such as public hearings or ICT enabled citizen feedback platforms.

15. Database management: MoFALD will expand its existing database which will serve as a repository of household level details such as eligibility, the level of damage, the progress of reconstruction and payment status. The VDC/Municipality will be responsible for all data entry in their remit and the DDC will be responsible for quality control of the data. In cases where grievances are appealed, DDC will enter final decisions in the database system. Access to the database will be shared with MoUD.

Table 4: Project Components and Respective Implementing Agencies

| Components | Departments/Agency |
|--|---------------------------|
| Component 1: Housing Reconstruction | • PMU/ MoUD / MoFALD |
| Component 2: Disaster Risk Management Systems | • PMU /MoUD |
| Component 3: Project Implementation Support | • PMU / MoUD / MoFALD |
| Component 4: Contingent Emergency Response | • Coordinating Authority |



| Activity | Responsible Agency |
|---|--|
| Earthquake Housing Damage and Characteristics Survey | MoUD/MoFALD/CBS |
| Hazard risk mapping | National Seismological Centre under Ministry of Industries |
| Disaster-resilient housing solutions/designs and subsidy packages | MoUD with support from partner organizations |
| Contracts with Partner Organizations | MoUD/MoFALD |
| Train PO engineers and artisan master trainers | MoUD through technical agency/service provider |

| | |
|--|---|
| Train village artisans | MoUD through technical agency/service provider |
| Facilitate building material markets | MoUD through technical agency |
| Disseminate information on subsidy, eligibility, and criteria for losing eligibility | MoUD/MoFALD |
| Public information campaign | MoUD/MoFALD |
| Cash grants | MoFALD through Banks |
| Housing reconstruction | MoUD/MoFALD to provide technical and social support to owners for own-construction through partner organizations/service provider |
| Progress and quality verification, reporting, payment authorization | Partner organizations/service providers and VDCs/Municipalities |
| Monitoring and Evaluation | MoUD/MoFALD |
| Grievance redress mechanism | MoUD/MoFALD/VDCs/Municipalities |

B. Fiduciary (Procurement, Financial Management and Disbursement)

Fiduciary Capacity

Financial Management:

16. **Implementing Entity:** The main implementing agencies will be MoFALD and MoUD. DL-PIUs will be established under MoFALD to provide close technical support and supervision to project districts. In addition, a PMU will be formed within MOF to approve annual work programs, undertake policy decisions, and coordinate the overall reconstruction effort. MoFALD and MoUD will manage the FM requirements and coordinate with the district-level PIUs to ensure compliance of financial procedures and accounting and reporting of the Project.

17. **Budgeting:** In consultation with MoFALD and MoUD, the PMU will prepare an annual work program and budget for project related expenditures. The annual work program and budget finalized by the PMU will be submitted to MoF for approval and budget allocation. MOF will allocate annual budgets to each Line Ministry under a separate budget code and will issue budget authorization to the each line ministry. The line ministries will provide budget authorization to cost centers for activities to be implemented by respective cost centers.

18. **Funds Flow:** Based on the authorization received from MoF, payments will be based on following procedures:

- **Component 1:** It is envisioned that MoFALD will make payments to beneficiary bank accounts. MoFALD will request DTCOs to issue cheques to concerned banks for making payments to the beneficiaries' bank accounts. The concerned banks on receipt of cheques from MoFALD, will make payments to the beneficiaries' bank accounts in various NRB licensed banks or acceptable financial institutions. The bank accounts should have been authorized by beneficiaries and instructed by MoFALD. The final procedure will be detailed in the POM.

19. The GoN will engage the services of banks or financial institutions, including a microfinance institution, or another entity having the capacity to provide the payment services in accordance with criteria set forth in the POM. GoN will enter into service agreements with the payment service providers in a manner acceptable to the Bank.

20. Other Components: The respective implementing agencies will obtain budget authorization from the MOF to make payments for eligible expenditures incurred in respective activities. The implementing agencies will request DTCOs to issue cheques to concerned payees.

21. Staffing: The implementing agencies will staff a dedicated and full time senior level accounts officer to undertake overall financial management responsibility which includes coordination and supervision for: i) annual budget/program preparation; ii) funds flow management; iii) accounting and reporting; iv) internal controls and auditing. He/she should be assisted by accounts officer, accountant and support staff. Considering the complexity and scale of the project, there may be requirement for FM consultant to assist/support in overall FM aspects. There will be need for training and capacity building on FM during the implementation of the project.

22. Accounting: The implementing agencies will maintain accounts of their expenditures following the government accounting system and respective Financial Procedure Act and Regulations. MoFALD, MoUD, PMU and PIUs will be responsible to maintain books of accounts as per Government cash basis accounting system. The project will also need to maintain a record of beneficiaries, contractors, designated bank accounts, grant/credit register, and statements of expenditures.

23. Financial Reporting: MoFALD and MoUD will prepare separate Interim Unaudited Financial Reports (IUFRRs) based on expenditures incurred and financial statements obtained from the cost centres. The financial reporting requirements at various levels will be detailed in POM. MoFALD and MoUD will submit separate IUFRRs to IDA every trimester (four months) within 45 days from the trimester-end.

24. Internal controls and internal audit: The implementing agencies will devise internal control system suitable to the activities to be implemented by them. The DTCOs will conduct internal audits on trimester basis of the implementing agencies. In case of DDCs, the internal audit will be carried out by its internal audit unit on trimester basis.

25. The major internal control risks associated with the project and mitigation measures are:

- In case of payments to beneficiaries, output based disbursement method will be followed. Advance will be provided and the amount of per unit grants would be identified during implementation and included in POM. Documentation of expenses will be done based on output verification via a verification mechanism. Output based disbursements would be followed for the project. The size of the housing grant will be agreed with the government and formally communicated to the government and will form the basis for documentation of expenditures under category 2 upon output completion verification.
- There could be a risk of payments to ineligible beneficiaries. This should be mitigated by verifying payments (possibly, through third parties) against approved beneficiary with

master data.

- Social audit, beneficiary identification & payment monitoring by local representatives/ CSOs
- Information dissemination/ campaigning through media and CSOs
- The detailed procedures for the following reconciliations required will be provided in POM
- Banks statements and cost centers record

26. External Audit: The Office of the Auditor General (OAG) will conduct external audit of the project. The MoFALD and MoUD will submit separate audited project financial statements for respective components/categories to IDA within six months from the end of each fiscal year. All records (including contracts, orders, invoices, bills, receipts and other relevant documents evidencing all expenditures) will be kept properly and the Bank's representatives will have the access to them for the purpose of examination)

27. Supervision Plan: IDA will follow a risk based approach in supervising the FM activities of the project including field visits. In the first year supervision would be carried out more frequently to enhance FM capacity and set-up FM systems.

28. Disbursement Arrangements: The GoN will pre-finance the project expenditures and direct payment through IDA will also be available. The Project Coordinator and accounts officer of MoFALD and MoUD will be authorized signatories for IDA disbursements and will handle the Designated Accounts for their respective components. Disbursements for both the implementing agencies will be based on SOEs. The implementing agencies will submit claims to IDA for their respective components/ categories supported by supporting documents such as Statement of Expenditures, copy of invoices, bank statement etc.

29. To facilitate liquidity position of Government treasury, especially given the earthquake situation and large scale of the project, two separate Designated Bank Accounts in local currency will be established at the Nepal Rastra Bank (Central Bank) on terms and conditions satisfactory to IDA. The project coordinator and accounts officer of each implementing agency will be authorized signatory for claiming from IDA and managing funds in DAs. The account opened at the MoFALD PIU will have an authorized limit of US\$20 million (related to disbursement categories 1 and 2) while the account opened at MoUD PIU will have an authorized limit of US\$2.5 million (related to disbursement category 1). The eligible expenditure amounts will be transferred from the Designated Bank Accounts to the government treasury on monthly or more frequently if required.

30. As per the covenants listed in the datasheet, the adoption of the POM and the engagement of financial management staff in MoFALD and MoUD in such number and with qualification, experience and terms of reference satisfactory to the Association are disbursement conditions.

31. Disbursement categories: The disbursement categories are as follows:

| Category | Category Description | Amount of Financing Allocated (SDR) | Percentage of Expenditures to be Financed (inclusive of taxes) |
|-----------------|---|--|---|
| 1 | Goods, works, non-consulting services, consultants' services, Incremental Operating Costs, and Workshops and Training | 21,600,000 | 100% |
| 2 | Housing Grants | 122,300,000 | 100% |
| 3 | Contingency Emergency Response | 0 | 100% |

There would be no retroactive expenditures under the project.

32. **Disclosure of information:** Project would be required to disclose the following: i) Audited Project Financial Statements; ii) list of eligible beneficiaries; and, iii) details of major contracts.

Procurement

General

33. Procurement for the Project will be carried out in accordance with the World Bank's "Guidelines: Procurement of Goods, Works and Non-consulting Services under IBRD Loans and IDA Credits and Grants by World Bank Borrowers" published by the World Bank in January 2011, revised July 2014 ("Procurement Guidelines"), in the case of goods, works and non-consulting services; and "Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits and Grants by World Bank Borrowers" published by the World Bank in January 2011, revised July 2014 ("Consultant Guidelines") in the case of consultants' services, and the provisions stipulated in the Legal Agreement. For each contract to be financed under the Credit, procurement methods or consultant selection methods, the estimated costs, prior review requirements, and time frame will be agreed between the Borrower and the Bank in the Procurement Plan. The Procurement Plan will be updated at least annually or as required to reflect the actual project implementation needs and improvements in institutional capacity. The general description of various items under different expenditure category is described below.

Selection of Consultants:

34. Most of the consultancy services are required to be hired immediately for rehabilitation and reconstruction. **Single-Source Selection** of consulting firms and individuals may be used only if it presents a clear advantage over competition for the required consulting services in accordance to paragraph 3.8. Selection of Consulting Firms based on the **Consultants' Qualification (CQS)** method may be appropriate for assignments estimated to cost not exceeding US\$300,000 equivalent in accordance with paragraph 3.7 of the Consultant Guidelines. For assignments under CQS method that are estimated to cost less than US\$100,000, advertisement is not mandatory as long as a shortlist of at least three qualified firms is established. In certain cases other methods of consultant's selection under the Consultant Guidelines may be adopted depending on the nature of the activities. If enough firms have not submitted the expressions of interest, shortlist may have lesser than 6 firms.

Procurement of Works and Goods:

35. Procurement of works has not been envisaged under the project at this point. However, in case of need, Bank's Procurement Guidelines and methods described below will apply.

36. **Direct Contracting:** Direct contracting for the procurement of goods (paragraph 3.7 of the procurement Guidelines) may be used to extend an existing contract or award a new contract. For such contracting to be justified, the Bank should be satisfied that the price is reasonable and that no advantage could be obtained by further competition. The direct contracting may be from the private sector, UN agencies/programs (for goods), or contractors or NGOs that have required skills.

37. **Shopping:** Shopping method in accordance with paragraph 3.5 of the Procurement Guidelines will be adopted for procuring readily available off-the-shelf goods of value less than US\$50,000. For shopping procedure, list of vendors/contractors already registered with government departments may be used for inviting quotations. The procurement plan should determine the cost estimate of each contract, and the aggregate total amount. The Borrower should solicit at least three price quotations for the purchase of goods, materials, or services (non-consulting), to formulate a cost comparison report.

38. **National Competitive Bidding (NCB):** Any contract estimated to exceed shopping threshold will be subject to NCB as per the Public procurement Act, 2007 of Nepal. In order to ensure economy, efficiency, transparency and broad consistency with the provisions of Section 1 of the Procurement Guidelines, the following exceptions shall apply in the case of NCB:

- a) Only the model bidding documents for National Competitive Bidding agreed with the Association (as amended from time to time), including qualification criteria shall be used;
- b) Bid documents shall be made available, by mail or in person, to all who are willing to pay the required fee;
- c) Foreign bidders shall not be precluded from bidding and no preference of any kind shall be given to national bidders;
- d) Bids shall be opened in public in one place, immediately after the deadline for submission of bids;

- e) Qualification criteria (in case pre-qualifications were not carried out) shall be stated in the bidding documents, and if a registration process is required, a foreign firm declared as the lowest evaluated bidder shall be given a reasonable opportunity of registering, without let or hindrance;
- f) Evaluation of bids shall be made in strict adherence to the criteria disclosed in the bidding documents, in a format and specified period agreed with the Association and contracts shall be awarded to the lowest evaluated bidders;
- g) Rebidding for prior review contracts shall not be carried out without the prior concurrence of the Association;
- h) Extension of bid validity shall not be allowed without the prior concurrence of the Association (A) for the first request for extension if it is longer than four (4) weeks and (B) for all subsequent requests for extension irrespective of the period; and
- i) There shall not be any restrictions on the means of delivery of the bids.

39. **International Competitive Bidding (ICB):** No ICB contracts have been foreseen at this point, however, if it comes up the Borrower shall use Bank's SBDs.

40. **Force Account:** When contractors/suppliers are unlikely to bid at reasonable prices because of the location and risk associated with the Project or a certain government agency has a sole right in certain type of works/supply, borrowers may use their own government departments' personnel and equipment or government owned construction unit may be the only practical method, provided that the borrower has sufficient managerial capacity and possesses the required technical and financial controls to report to the Bank on expenditure as per paragraph 3.9 of the Procurement Guidelines.

41. **Other Conditions:** Bank may also consider further simplification of procedures if so requested by the implementing agencies and are within the overall framework of Bank Guidelines.

Implementation Arrangements and Capacity Assessment Of The Implementing Agencies

42. The implementation of the project shall be decentralized at the sectorial level. The PIUs will have a dedicated procurement officer (focal person) responsible for all procurement activities including carrying out prior reviews at the project level. The procurement officer will be supported by a dedicated procurement consultant in each line agency to carry out procurement activities and maintain records related to procurement. Agreements on staffing structure will be reached in the following missions. The PIUs also uses e-GP system developed by Public procurement Monitoring Office (PPMO) as appropriate. PIUs will be set up in each of the implementing agencies and will be suitably staffed.

43. The capacity assessment of the implementing agencies was carried out based on the observation of procurement performance of implementing agencies under the ongoing Bank financed projects, post review findings and interaction/ interview with the officials currently involved in the ongoing Bank financed projects. The assessment looked at the resources and internal procedures as well as its understanding and familiarity with the Bank's guidelines, procedures, documentation etc. In general, the overall system looks fairly good, however, there is an increased risk of fraud and corruption, in particular with regards to the abuse of simplified

procurement procedures because contractual terms and conditions may not be observed or applied. Therefore, the risk for this Project has been rated accordingly aligning with the FM risk and the final integrated fiduciary risk is reflected in the project data sheet and Annex.

44. Due to the perceived substantial risk rating for this project, the following mitigation measures has been proposed: i) establishment of PIUs under MoUD and MoFALD; ii) recruitment of procurement and financial management support consultants; iii) training of procurement and financial management personnel; iv) hand holding support from the Bank; v) procurement post review by the Bank; vi) increased supervision support mission; vii) preparation and finalization of acceptable POM; viii) use of banking channels for payments to beneficiaries; ix) social audits, CSOs in beneficiaries payments; and, x) internal audit by an independent agency. This risk rating will be reviewed and updated periodically as the project progresses based on the achievement of the proposed mitigation measures and overall procurement performance.

Procurement Plan

45. The Project will initially prepare simplified Procurement Plan for the Project implementation which will provide basis for the procurement method. This simplified Procurement Plan will be later used to prepare detailed plan covering 18 months period. The Procurement Plan once finalized will be made available in the Project's database and in the Bank's external website. The Procurement Plan will be updated in agreement with the Project Team annually or as required to reflect the actual project implementation needs and improvements in institutional capacity. The Project will also use the proposed procurement monitoring tool SEPA or STEP as the Project Implementation advances.

Frequency Of Procurement Supervision And Review By The Bank

46. The Bank will normally carry out the implementation support mission on semi-annual basis. The frequency of the mission may be increased or decreased based on the procurement performance of the Project.

Review by the Bank

Prior Review

47. The Bank will prior review following contracts: Goods: All contracts of value above US\$1million equivalent; Services (Other than consultancy): All contracts of value above US\$1 million equivalent; Consultancy Services: All contracts of value above US\$300,000 equivalent for firms; and above US\$200,000 equivalent for individuals.

Procurement Methods:

48. **For Goods, Non-Consulting Services and Works:** ICB, LIB, NCB, Shopping, DC, Force Account, Procurement from United Nations Agencies, Procurement under PPP Arrangements, Community Participation in Procurement.

49. **For Consulting Services:** QCBS, QBS, FBS, LCS, CQS, SSS for firms and Individuals, Individual Consultants, Selection of UN Agencies, Use of NGOs, Banks, Auditors, Service Delivery Contractors.

Environment and Social (including safeguards)

50. See Annex 6 for Action Plan.

Annex 4: Implementation Support Plan

NEPAL: Earthquake Housing Reconstruction Project

1. The Implementation Support Plan (ISP) for the Project is developed based on the specific nature of the components, the planned implementation schedule, lessons learned from similar projects in the sector, and specific needs as identified by the respective assessments. The plan will be regularly reviewed and revised as required.
2. The ISP includes frequent review of implementation performance and progress, especially given the post-disaster context, large geographic footprint, and multi-sectoral nature. The Bank's team will monitor implementation through: i) reporting of key performance indicators as defined in the Results Framework; ii) National, district, and village/community level project implementation plans; iii) independent verification of project activities through field visits and documentation review; iv) proper fiduciary management of all activities carried out by the PIUs; v) reconciliation of payments with contracts; vi) spot supervision of works on the ground, and vii) regular communication with implementing partners.
3. Information from various sources will be used to assess and monitor implementation progress. In addition to the data generated through the Project's MIS and M&E systems, the Bank will also review the findings and results of third party assessments and environmental and social audits as well as the grievance redress mechanism. In addition, and as required, targeted support including short missions by subject matter experts will be carried out.
4. The Bank's procurement, financial management, and environmental and social safeguards specialists will also provide timely and effective support to the PIUs and implementing partners, and in addition to carrying out an annual ex-post review of procurement that falls below the prior review thresholds, the procurement specialist will lead procurement focused missions depending on the needs and as agreed to by the PIUs. The financial management specialist will review all financial management reports and audits and take necessary follow-up actions as per the Bank procedures. These team members will also help identify capacity building needs to strengthen procurement and financial management capacity. Semiannual inputs from the environmental and social specialists will be required throughout the Project, and formal supervision missions and field visits will monitor the implementation of the ESMF, IPPF, and RPF in accordance with the Bank safeguard policies, and suggest any corrective measures as necessary.
5. The following ISP reflects the preliminary estimates of the skill, timing, and resource requirements over the implementation period of the Project. Keeping in mind the need to maintain flexibility over project activities from year to year, the ISP will be reviewed from time to time to ensure that it continues to meet the implementation support needs of the Project.
6. In addition, the team will work in taking advantage of opportunities for cross-learning, combining external expertise, and carrying out joint missions with ongoing Bank projects as well as with other development partners.

Implementation Support Plan

7. The table below indicates the estimated level of inputs that will be needed from the Bank to provide implementation support for the proposed Project. Based on the average cost of missions in similar projects, an amount of US\$45,000 per mission is presented. Whenever possible, missions will be combined.

Table 10: Implementation Support Plan

| Time Year | Focus | Primary Skills Needed | Number of Trips | Resource Estimate | Partner Role | Comments |
|------------------|---|---|---|--|--|---|
| 1 | <ul style="list-style-type: none"> • Project launch • FM systems functioning effectively • Procurement practices following Bank norms • Safeguards systems functioning effectively. | <ul style="list-style-type: none"> • Team lead • Social Protection Specialist • FM, Procurement • Safeguards Specialist • Disaster Management Specialist • Communication Specialist • Housing Specialist | <ul style="list-style-type: none"> • Jul 2015 | <ul style="list-style-type: none"> • 12 staff weeks | <ul style="list-style-type: none"> • Staff up PMU/ PIUs/DL- PIUs • Contract support firms | <ul style="list-style-type: none"> • Project will likely become effective in July 2015. • Task team to support smooth start-up following effectiveness |
| 2 | <ul style="list-style-type: none"> • Monitor implementation of project activities • FM, Procurement, Safeguards | <ul style="list-style-type: none"> • Team lead • Social Protection Specialist • FM, Procurement • Safeguards Specialist • Disaster Management Specialist • Housing Specialist | <ul style="list-style-type: none"> • Nov. 2015 • Feb 2016 | <ul style="list-style-type: none"> • 12 staff weeks • 12 staff weeks | <ul style="list-style-type: none"> • Prepare comprehensive project progress report in advance of each mission • Prepare implementation and procurement plans for following year • Organize field visits | <ul style="list-style-type: none"> • Review implementation, commitment and disbursement status • Ensure safeguards arrangements are built into implementation plans |
| 3 | <ul style="list-style-type: none"> • Monitor implementation of project activities • Mid-Term Review • FM, Procurement, Safeguards | <ul style="list-style-type: none"> • Team lead • Social Protection Specialist • FM, Procurement • Safeguards Specialist | <ul style="list-style-type: none"> • Aug. 2016 • Feb 2017 | <ul style="list-style-type: none"> • 12 staff weeks • 12 staff weeks | <ul style="list-style-type: none"> • Prepare comprehensive project progress report in advance of each mission • Prepare implementation | <ul style="list-style-type: none"> • Support to monitor progress of activities, in-depth technical review of implementation, make adjustments to |

| Time Year | Focus | Primary Skills Needed | Number of Trips | Resource Estimate | Partner Role | Comments |
|------------------|--|---|---|--|---|--|
| | | <ul style="list-style-type: none"> • Disaster Management Specialist • Housing Specialist • M&E Specialist | | | <ul style="list-style-type: none"> • Prepare implementation and procurement plans for following year • Organize field visits • Mid-term review | implementation plan if needed. |
| 4 | <ul style="list-style-type: none"> • Project withdrawal and closure • Scaling up of successful models with GoN | <ul style="list-style-type: none"> • Team lead • Social Protection Specialist • FM, Procurement • Safeguards Specialist • Disaster Management Specialist • Housing Specialist | <ul style="list-style-type: none"> • Aug. 2017 • Feb 2018 | <ul style="list-style-type: none"> • 12 staff weeks • 12 staff weeks | <ul style="list-style-type: none"> • Prepare comprehensive project progress report in advance of each mission • Prepare implementation and procurement plans for following year • Organize field visits | <ul style="list-style-type: none"> • Support to monitor progress of activities, review implementation schedule to ensure timely completion of project activities. |
| 5 | <ul style="list-style-type: none"> • Project withdrawal and closure • Scaling up of successful models with GoN | <ul style="list-style-type: none"> • Team lead • Social Protection Specialist • FM, Procurement • Safeguards Specialist • Disaster Management Specialist • Communication Specialist • Housing Specialist | <ul style="list-style-type: none"> • Aug. 2018 • Feb 2019 | <ul style="list-style-type: none"> • 12 staff weeks • 12 staff weeks | <ul style="list-style-type: none"> • Prepare comprehensive project progress report in advance of each mission • Prepare project closing, evaluation, and monitoring arrangements • Organize field visits | <ul style="list-style-type: none"> • Prepare closing arrangements • ICR Mission |

Annex 5: Economic Analysis

NEPAL: Earthquake Housing Reconstruction Project

1. The project, through its different components, will provide both direct and indirect benefits to affected households in the target area. Direct beneficiaries include members of the approximately 55,000 households in the targeted areas whose houses were destroyed/damaged by the earthquake.

2. While Nepal has always been under the threat of an earthquake because of it being located in a relatively active seismic zone, there are no models that can predict the exact time, location or magnitude of the next earthquake. Though scientists are working on a number of sophisticated models of earthquakes and study the history of quakes along fault lines, no one has enough of an understanding about the conditions—the rock materials, minerals, fluids, temperatures, and pressures—at the depths where quakes start and grow to be able to predict them. Unlike floods, it is therefore difficult to estimate the return period of the next event even through some kind of a scenario analysis. The damage could also vary significantly especially in terms of the number of deaths greatly depending on the time of the day the earthquake occurs. The last one in Nepal happened in the afternoon when the rural agricultural workers were outdoors. An earthquake at night would have increased the casualties many times.

3. Economic analysis was performed to assess the rate of return of capital investments needed for the reconstruction and recovery from the earthquake. In addition to project implementation support, the project components include: i) Housing Reconstruction; and ii) Disaster Risk Management Systems. Since it is difficult to make any assessment of benefits from resilient housing in terms of a protection from a future such earthquake, the analysis here takes a more straightforward approach of calculating the returns to the households living in resilient home and staying out of poverty compared to them not receiving any benefits to jump-start their post-disaster life.

4. For the purposes of the economic analysis, we look at the major project component, (i) Housing Reconstruction (\$185 million).

Housing Reconstruction

5. The earthquake destroyed over 490,000 rural residential houses. The project will fund reconstruction of approximately 55,000 houses with multi-hazard resilient features. These features will include resilient construction methods and materials. Local construction workers will be trained to use multi-hazard resilient construction methods. In consultation with the Government of Nepal the private sector will be engaged to restart the building materials supply chain and materials hubs.

6. As a result of the project, approximately 50,000 participating households will have multi-hazard resilient core housing units. Direct project beneficiaries whose houses are reconstructed as

multi hazard resistant core units will be less likely to suffer from future earthquakes.⁴ A large number of local construction workers will learn valuable construction skills. The local housing materials market will be active and help the local economy with multiplier effects.

Costs calculations

7. For the purposes of the economic analysis, the total cost of component 1 of the Project, building multi-hazard resistant core housing units is considered. Component 1 of the project is US\$185 million, 92 percent of the total project costs. We assume that approximately 55,000 multi-hazard resistant core housing units will be built by the project funding. The cost is to be disbursed in the amounts described in the table below over the five year period from 2016 to 2021. Following the end of the project the continued operating and maintenance costs of the project is considered to be between 0.5 to 1.0 percent of the overall costs.

Distribution of project costs

| | Project duration (Years) | | | | | | Total |
|-------------------------------|--------------------------|--------|--------|--------|-------|------|--------|
| | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | |
| Costs (m\$) | 0.0 | 55.5 | 37.0 | 83.3 | 9.3 | 0.0 | 185 |
| Number of housing units built | 0 | 16,500 | 11,000 | 25,750 | 2,750 | 0 | 55,000 |

COUNTERFACTUAL BENEFIT CALCULATIONS WITHOUT THE PROJECT

8. To understand the counterfactual, we assume in the absence of the project no new houses will be built. In other words, the potential beneficiaries will continue to live in temporary structures that have no significant shadow rental value. The shadow rental value of housing is the imputed welfare benefit of living in a house. Another way to look at it to consider the absence of shadow rental value as an implicit cost of living in temporary structures. Thus, there will be no costs and benefits in the absence of the project. We relax this assumption in the sensitivity analysis section.

ECONOMIC ANALYSIS

9. The main benefit component of this project is the shadow annualized rental income from the newly built multi-hazard resilient housing units the approximate 55,000 beneficiary households will live in resulting from the project. It is assumed that the reconstructed houses will be significantly more valuable than their old homes, with the use of improved construction methods, and materials.

10. The economic analysis focuses on the single benefit of shadow annualized rental income from the multi-hazard resilient housing to the household receiving the housing grant. Other benefits such as the prevention of death and injuries in case of earthquake, and poverty alleviation through livelihood support are not taken into account in this economic analysis. Therefore the resulting quantitative indicators of economic benefits from the project are underestimates.

⁴ According to the 2010 household survey of Nepal, the average rural household size is 5 members per household.

11. The project benefits are based on the following assumption:
- The average value of a multi-hazard resilient new home will be US\$15,000.⁵
 - The value of home to rent ratio will be 20.⁶
 - For the benefit calculations, the new homes will have the useful life of 20 years⁷ beginning the year after the unit was built.
 - The discount rate is 10 percent.⁸

Conservative Estimates

12. Based on the assumptions listed above we consider the benefit of living in multi-hazard resilient houses for approximately 55,000 participating households in terms of shadow rental income for the next 20 years. Under this scenario we only take the benefit of living in homes and ignore additional benefits of prevention of potential death and injuries and loss of other assets resulting from future earthquakes.

13. We find the project to have the internal rates of return (IRR) of 21.2 percent and net present value (NPV) of 265.0 million dollars, with the benefit costs ratio (BCR) of 1.8. Both the internal rates of return and net present value of the benefits to the affected households show that the project is economically viable by this conservative estimates.

Sensitivity Analysis

14. We relax the assumption that households will continue to live in temporary structures for 20 years or more. Alternately, we assume that approximately 55,000 potential beneficiary households will build their homes exactly at the same rate as with the project. However, without the project, quality of the houses will be as good as the average rural house, based on 2010 survey. The sale value of such a house will be US\$7,059 and annual shadow rental will be US\$201 in current prices. Under these alternate assumptions the internal rates of return (IRR) of 14.8 percent and net present value (NPV) of 198.2 million dollars, with the benefit costs ratio (BCR) of 1.3.

Conclusion

15. Based on the qualitative analysis of the avoided deaths, injuries, and loss of assets from the resilient housing reconstruction and the livelihood support and the calculated internal rates of

⁵ The average value of a pre-earthquake rural housing unit was US\$ 7000 in current prices, based on 2010 household survey. It is assumed these old houses used construction methods and materials that were not multi-hazard resilient. Note, the value of a house includes the value of the land, as well as its location value, such as access to market etc. New houses with improved construction and materials are assumed to be significantly more valuable than the old houses.

⁶ The house price to rent ratio is the price of the house divided by the annual rent. The estimated house price to rent ratio in Nepal was 35 for rural areas and 81 for urban areas based on 2010 household survey data. These values are exceptionally high as compared with the ratio in the US. We thus use a more conservative ratio of 20.

⁷ We use 20 years as the commonly used life of infrastructure lending projects.

⁸ The standard discount rate is 12 percent. However, due to the humanitarian nature of the project we use a slightly lower social discount rate.

returns for the shadow annualized rental income from the multi-hazard resilient houses, we conclude that the project is economically viable.

References

Nepal LSMS Survey 2010.

Annex 6: Safeguards Action Plan (SAP)

NEPAL: Earthquake Housing Reconstruction Project

I. Background Guidance

1. The Earthquake Housing Reconstruction Project is being prepared and implemented according to Paragraph 12 of the World Bank's Operational Policy 10.00, which allows for certain exceptions to the investment project financing policy requirements, including deferral of safeguards requirements, if the Bank deems the recipient to be in urgent need of assistance because of a disaster or conflict. In the context of this project, Nepal experienced a major earthquake on April 25, 2015 measuring 7.8 on the Richter scale and several aftershocks, including a big one measuring 7.3 magnitude on May 12. The impact of the earthquake resulted in more than 8,676 deaths and over 21,952 injuries; significant damage to public and private buildings, and infrastructure disruptions to telecommunications, and has also triggered extensive landslides and avalanches causing further damage and disruption in essential services delivery.

2. The exception allowing for deferral of environmental and social requirements was granted for this Project and the Bank has prepared, in accordance with its policies, the Safeguards Action Plan, a project-level safeguards planning document that provides a time-bound plan setting forth the steps and the sequential planning and coordination for project activities and the preparation by the GoN of the relevant safeguards instruments to ensure compliance with the safeguards requirements. The Safeguards Action Plan is guided by the dual objective of ensuring that there is a roadmap for safeguards compliance during project implementation and providing clear guidance to the client on the types of actions and instruments required so as to facilitate speedy implementation of emergency services.

II. Project Description

3. The Project Development Objective (PDO) is to restore affected houses with multi-hazard resistant core housing units in targeted areas and enhance its capacity for long-term disaster resilience. The Project comprises 4 components briefly described below:

4. *Component 1: Housing Reconstruction:* The component provide i) housing grants to approximately 55,000 participating household beneficiaries for the reconstruction of multi-hazard resilient core housing units ; ii) support the establishment of a program of owner-driven housing reconstruction, including social, environmental, and technical support mechanisms for beneficiary households, training of artisans and beneficiaries, among others.

5. *Component 2: Disaster Risk Management Systems:* The component will support the GoN in strengthening its overall ability to execute better disaster risk reduction, preparedness, and disaster response, in line with global best practices.

6. *Component 3: Project Implementation Support:* This component will finance establishing and operating the Project Management Unit (PMU), the Project Implementing Units (PIUs), the

District-Level Project Implementation Units (DL-PIUs), and other related services such as consultancies, exposure visits, studies, knowledge exchange programs, etc.

7. *Component 4: Contingency Emergency Response:* The purpose of this component is to allow for emergency response, if required, to draw resources from unallocated expenditure categories, re-categorize and reallocate financing from project components, and a mechanism to channel additional funds should they become available as a result of an emergency.

III. Project Locations and Some Salient Social and Environmental Characteristics

8. The project will be implemented in targeted areas in the most severely affected districts of Gorkha, Kavrepalanchok, Dhading, Nuwakot, Rasuwa, Sindupalchok, Dolakha, Ramechhap, Okhaldunga, Makwanpur, Sindhuli, Kathmandu, Bhaktapur and Lalitpur. All of the affected districts are located in the Central and Western Region of Nepal and physiographically the area lies in the middle hills and the mountains.

9. Table 1 shows some of the important social characteristics of these 14 districts, including impacts from the earthquake.

Table 1: Salient Socio-Economic Characteristics of the 14 Severely Affected Districts

| | Total | Male | Female |
|--|---|-------------|---------------|
| Population | 5,368,513 | 2,658,274 | 2,710,239 |
| Household Head Below 30 years of Age (percentage) | 19.2% | 16.4% | 27.1% |
| Household Head Above 60 years of Age (Percentage) | 15.2% | 15.0% | 15.8% |
| Total Number of Households | 1,237,343 | | |
| Average Household Size | 4.34 | | |
| Female House Ownership (Percentage) | 11% | | |
| Female Headed Households (Percentage) | 26% | | |
| Percentage of VDCs with High Concentration of Disadvantaged Groups | 40.5% | | |
| Total Number of Deaths due to Earthquake | 8,556 (total); 3,831 (male); 4,711 (female) | | |
| Total Number of Injuries due to Earthquake | 16,095 | | |
| Number of Private Houses Destroyed Due to Earthquake | 458,272 (Fully Destroyed); 177,389 (Partially Destroyed) | | |
| Number of Government Buildings Destroyed Due to Earthquake | 481 (Fully Destroyed); 865 (Partially Destroyed) | | |

Source: National Population and Housing Census 2011; ddrportal, accessed 24 May 2015

10. Most of the affected districts also lie between the two active tectonic plates —main boundary thrust (MBT) and main central thrust (MCT) which are still active and landslides and soil are frequent along these faults. Furthermore, the increasing population and land use intensification in the Middle Hills of Nepal have resulted in widespread conversion of primary forests, which has left the districts more fragile and vulnerable. Tropical, Sub-tropical and temperate type of forest exists in these districts which are mainly managed by community forest groups. Cracks and scars have been formed in the watershed of these affected districts which will be susceptible to landslides with the onset of the monsoon.

11. There are five protected areas in the affected district; viz Manaslu Conservation Area, Langtang National Park, Shivpuri-Nagarjuna National Park, Gaurishankar Conservation Area and

Mt Everest National Park (also and World Heritage). People live in the buffer zones of these protected areas. The Langtang National Park with an area of 1,710 km² (660 sq mi) and established in 1976 as the first Himalayan national park is located in the Nuwakot, Rasuwa and Sindhupalchok districts. Langtang village, in this park which exhibits a high diversity of 14 vegetation types in 18 ecosystem and is a popular trekking destination, was washed away by an avalanche killing many tourists after the earthquake. Similarly, the recently declared Gaurishakkhar conservation area which lies in Dolakha district, has also been affected. The Mt Everest National Park is a world heritage, and popular tourist destination. Besides the protected areas, there are community managed forests and government managed forests. The community managed forests in the buffer zones and outside the zones are important in meeting the firewood, timber and fodder needs of the respective communities.

IV. Possible Social and Environmental Impacts/Risks

12. The Post-Disaster Needs Assessment (PDNA) led by Government of Nepal (GoN) supported by the World Bank, United Nations Development Program (UNDP) and the European Union (EU) for the National Planning Commission (NPC), will help determine the social and environmental effects of the earthquake, and further analysis would be required to examine the precise environment and social impacts of the project during project implementation. The following is a preliminary list of possible impacts known at this stage:

Social Impacts and Risks

- Positive benefits to beneficiaries, including poor, women, indigenous peoples (IPs), Dalits, etc., in the form of variable housing grants;
- Resettlement impact due to limited relocation of settlements/households that are no longer habitable due to ground fissures and high risks of seismic and landslide risk.
- Potential loss of livelihood and damages to crops and trees;
- Positive impact on IPs through housing, but their possible exclusion from project benefits due to their marginalized status;⁹
- Inadequate consultations with vulnerable groups including IPs, Women, Dalits and other marginalized groups leading to their low participation in project activities;
- Ineffective mechanisms for benefit targeting and information dissemination leading to exclusion of marginalized groups from project benefits, including housing.

Environmental Impacts

- The construction of traditional village houses/shelters will put pressure on the existing forest resources and local resources like extraction of construction materials (aggregates, clay for binding materials, etc) thus increasing the extreme vulnerability of landslides and soil erosion;

⁹ Indigenous groups, known as *Adivasi Janajatis* in Nepal, constitute 55 percent of the total population of the 14 severely affected districts. Preliminary data on the impact of the earthquake indicates that the damage sustained by these groups have been significant. For instance, 30.51 percent of the dead were from the ethnic Tamang community whilst they constitute only 5.8 percent of Nepal's total population.

- Need for timber for construction of houses/shelters will put pressure on the natural resources, protected areas and Buffer zones which lies in the vicinity of the affected districts;
- Positive impacts on the local forest and environment can be anticipated through the promotion of environmental good practices (e.g. alternative energy, recycling/ re-use of timber/materials from damaged houses) as part of design and construction of houses, on case-by-case basis where appropriate, and reducing the deterioration of the environment and increasing the resilience of eco-systems in an area, if relevant and necessary, through afforestation programs, slope stabilization through re-vegetation, and bio-engineering activities;
- Impact on environmental health and sanitation as well as occupational health & safety risks due to removal and disposal of debris/demolition materials which will potentially lead to water/air pollution.
- Positive impacts with regards to providing improved shelters to the community through in-house air pollution management techniques (e.g., ventilation, smokeless stove, solar power) and sanitation measures such as provisions for latrines, etc;
- There is a high potential for supporting the concept of ‘build back better’ and disaster risk reduction through the adoption of new and resilient engineering technologies for constructing rural homes.

Consideration of Alternatives

13. No meaningful alternative consideration is anticipated through the current project approach. However, during implementation, various alternatives for each individual houses/shelter related to siting/ selection/ options of the sites/ location (avoiding landslide prone areas, avoiding forests, etc), designs, demolition and clearing of land/ disposal of debris where existing housing stock is not salvageable; relevant environmental good practices (such as earthquake resistance, improved smokeless stoves, rainwater harvesting, alternative energy, etc), and construction materials (timber, sand, clay, concrete blocks etc) will be explored and considered .

V. Safeguards Instruments, Mitigation Process and Implementation Schedule

14. The activities supported under the project will involve: housing grants to rebuild private houses in-situ; support for owner-driven rebuilding with technical assistance, training and supervision; civil works that will encourage utilization of easily accessible materials and familiar methods in house construction; limited relocation of households/settlements, if necessary.

15. The project will potentially lead to both environmental and social impacts (positive as well as negative) though it is expected that the adverse impacts would be minimal, site-specific and not irreversible. Accordingly, an Environmental and Social Management Framework (ESMF) will be prepared to guide the identification of possible social and environmental issues; develop mechanisms to comply with relevant GoN’s and World Bank’s policy requirements; lay out the approach and procedures relevant during the planning and implementation to mitigate the potential environmental and social impacts of the proposed investments; and describe the institutional and

implementation arrangements, the monitoring mechanisms, and the capacity building needs for effective implementation of the ESMF.

16. Since the project triggers the Bank's OP4.12 and OP4.10, a Resettlement Policy Framework (RPF) and an Indigenous People's Planning Framework (IPPF) will be prepared by the Government of Nepal. The Resettlement Policy Framework will clarify resettlement principles, organizational arrangements and design criteria to be applied to subprojects to be prepared during the project implementation. The Indigenous People's Planning Framework will outline procedures to ensure free, prior, and informed consultation with affected IP communities, as well as institutional arrangement, monitoring arrangement and disclosure arrangement.

Accordingly, the ESMF will consist of:

- i. Screening methodology for all types of proposed civil works (housing activities) to identify relevant environmental and social issues and risks as well as environmental enhancement opportunities for each civil works activity, and to determine relevant national requirements related to environmental, health and safety management as well as, the applicability of the Bank's Operational Policies on environment (4.01); natural habitats (OP/BP 4.04); forests (OP/BP 4.36); physical and cultural resources (OP/BP 4.11), indigenous peoples (OP/BP 4.10); and involuntary resettlement (OP/BP 4.12).
- ii. A template for site specific Environmental Management Plans (EMPs), to be completed and customized for each subproject based on the results of site screening to specify the siting, design, demolition/land clearing, and construction management requirements for construction of houses and other physical activities.
- iii. Procedures, roles and responsibilities for carrying out and approving site-screening templates and site specific EMPs ensuring that subproject siting, designs, plans, specifications and implementation plans reflect the environmental screening outcomes and EMP requirements are compliant with applicable World Bank safeguard policies and also meet relevant policies/acts, strategies/rules and regulations of GoN.
- iv. Approach and Action Plans, if necessary, to mitigate the direct and indirect/induced impacts on community forests, government forests, protected areas and Buffer Zone considering the potential risks to these resources.
- v. Gender and Social Inclusion Action Plan (GESI Action Plan) that will include approaches and measures to ensure the participation of and benefits to marginalized groups like the poor, landless, women, disabled, and the Dalits, in project activities and benefits.
- vi. A multi-tiered Grievance Redress Mechanism to receive and handle complaints relating to exclusion and inclusion errors during beneficiary targeting, those adversely affected by the project, and delivery of project benefits. Such mechanisms will rely on existing community institutions, district-level Project Implementation Units (DL-PIUs), and at the center the PMU.
- vii. Generic subproject safeguard supervision/monitoring form developed for housing and rehabilitation works (under the cash for work sub-component) to record compliance with the sub-project EMP, IPP, GESI Action Plan and (A)RAP. These will be administered by the Teams that will be mobilized to provide close technical support and supervision at the local levels.

- viii. Capacity building needs of implementing agencies relating to safeguards, and a plan for training programs at various levels that will be required to implement the ESMF and monitor compliance.

Consultation and Disclosure

17. The GoN will prepare the safeguards documents (ESMF, RPF and IPPF) based on the findings of the PDNA and will undertake additional social and environmental assessments, if required. During documents preparation, consultations will be held with relevant departments and district-level offices of the government, project-affected groups, community based organizations, NGOs, women's groups, indigenous peoples' organizations, etc., at both national and local levels about the project's environmental and social aspects. For meaningful consultations, the concerned groups will be provided with the draft documents in a timely manner prior to consultation and in a form and language that is understandable and accessible to the groups to be consulted. The revised safeguards documents (ESMF, RPF and IPPF), taking into account feedback received during consultations, will be (a) re-disclosed at the country level and at public places accessible to project-affected groups and local institutions; (b) officially submitted to the World Bank for clearance; and (c) submitted for disclosure on the public World Bank's Infoshop.

Responsibilities, Timeline, Costs and Implementation Schedule

| Activities | Responsibility | Timeframe |
|--|---|---|
| Preliminary PDNA report relevant to the project | NPC, GoN line ministries, WB and other development partners | June 4, 2015 |
| Finalize Safeguards Action Plan | WB | Prior to Appraisal |
| Draft ESMF/RPF/IPPF prepared | MoUD, MoFALD | June 29, 2015 |
| | | |
| Draft ESMF/RPF/IPPF translated into local languages and disclosed in-country | MoUD, MoFALD | August 31, 2015 |
| Clearance of revised ESMF/ RPF/ IPPF by WB and GoN; and disclosure of the same by GoN and in WB's InfoShop | WB, MoUD, MoFALD | Disbursement condition for Component 1 |
| Designation of environmental and social focal point at implementing agency(ies) | MoUD, MoFALD | August 1, 2015 |
| ESMF/RPF/IPPF Orientation/ training to implementing agencies | MoUD, MoFALD/WB | Together with project launch |
| Environmental and social awareness/ information dissemination to the first batch of recipients | MoUD, MoFALD | Need to be determined during project implementation |