



Government of Nepal

Ministry of Federal Affairs and Local Development

OFFICE OF THE DISTRICT COORDINATION COMMITTEE

Dolakha

Earthquake Housing Reconstruction Project

(EHRP)

Environmental and Social Screening Report (ESSR)

Sub project Tallo Mati/Settlement: DOL/BM-5: Bhimeshor Municipality, Dolakha District

Date: 24 August, 2017

Abbreviation

| | |
|---------|---|
| BM: | Bhimeshwor Municipality |
| CBS: | Central Bureau of Statistics |
| CF: | Community Forest |
| CL-PIU: | Central Level Project- Implementation Unit |
| DCC: | District Coordination Committee |
| DDRC: | District Disaster Response Committee |
| DL-PIU: | District Level – Project Implementation Unit |
| DOL: | Dolakha |
| DTO: | District Technical Office |
| DUDBC: | Department of Urban Development and Building Construction |
| EECCS: | Energy Environment and Climate Change Section |
| EHRP: | Earthquake Housing Reconstruction Project |
| EIA: | Environmental Impact Assessment |
| ENRC: | Environment and Natural Resource Committee |
| EPA: | Environment Protection Act |
| EPR: | Environment Protection Rule |
| ESMF: | Environmental and Social Management Framework |
| ESMP: | Environmental and Social Management Plan |
| FGD: | Focus Group Discussion |
| GPS: | Global Positioning System |
| ICS: | Improve Cooking Stove |
| IEE: | Initial Environmental Examination |
| IP: | Indigenous People |
| IPDP: | Indigenous People Development Plan |
| KRM: | Kalinchowk Rural Municipality |
| LGCDP: | Local Governance and Community Development Program |
| MoFALD: | Ministry of Federal Affairs and Local Development |
| MoFSC: | Ministry of Forest and Soil Conservation |
| MoUD: | Ministry of Urban Development |
| NRA: | National Reconstruction Authority |
| RAP: | Resettlement Action Plan |
| RCC: | Reinforced Concrete Cement |
| RM: | Rural Municipality (<i>Gaupalika</i>) |
| VCDP: | Vulnerable Community Development Plan |
| VDC: | Village Development Committee |

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1. Background

Nepal Earthquake of April 2015 and subsequent aftershocks including of May 2015, caused wide spread destruction of residential houses, heritage sites, water supply system, government building, rural road, health posts etc. Dolakha is one the earthquake-affected district. According to National Reconstruction Authority (NRA) source, the total number of houses damaged in Dolakha district is 58,388 of which 56,553 were fully damaged and 1,835 were partially damaged.

Government of Nepal has selected Dolakha district as one of the three districts to be supported under the World Bank funded Earthquake Housing Reconstruction Project (EHRP). The main objective of the EHRP is to restore earthquake-affected houses with multi-hazard resistant core housing units in targeted districts (Nuwakot, Dolakha and Dhading districts) and to enhance the government's ability to improve long-term disaster resilience. The project has four components: (1) Improved Housing Reconstruction, (2) Disaster Risk Management Systems, (3) Project Implementation Support and (4) is for Contingency Emergency Response.

2. Scope of EHRP

EHRP supports only reconstruction of owners built houses. Government, through EHRP, provides grants to households for construction of residential houses following 'owner-driven' housing construction model.

EHRP approach includes:

- Beneficiary households will mostly build their house on their own land. Thus, land acquisition and resettlement is not envisaged under the project.
- Residential houses will be small and constructed by the beneficiary household themselves.
- Not all the houses will be constructed at the same time. Beneficiary households are expected to build their houses at their own pace.
- Contractors will not be used. Households have option to hire skilled and unskilled labourers as needed.
- In Nepal, community members also come together to help each other to build their houses and community help is also provided to the vulnerable households.
- General awareness/orientation on building earthquake resilient houses, environment and Social safeguards and "Build Back Better Opportunity" provisions in the project to beneficiary households.
- EHRP (housing component) does not support reconstruction of heritage/cultural sites, schools and other physical and social infrastructure and services.

Government's overall approach for earthquake disaster recovery in Nepal includes:

- Skilled-training (mason, carpentry, plumbing, electrical) as a part of overall strategies are being provided by Department of Urban Development and Building Construction (DUDBC) in coordination with other line agencies and NGOs/INGOs. All interested community members and beneficiaries including those from vulnerable groups can take the training.
- Government recognizes the need for supplementary top-up financial assistance worth NPR 50,000 for vulnerable households which could be in the form of materials and labor support among others. This supplementary financial support

will be provided by partner organizations. Currently, the government is preparing the guideline for vulnerable support package for partner organizations and is expected to be finalized by end of August 2017.

- Housing construction support of NRs 25,000 may be used as an opportunity to promote sanitations, renewable energy (including solar power, Improved Cooking Stoves (ICS) or bio-gas etc. As such, the sanitation part of the settlement is likely to improve. Unless toilet or installation of alternative energy provision is not adopted by beneficiaries the amount allocated will not be paid to the beneficiaries

3. Sub-project (Settlement)

Environmental and Social Screening is done at settlement level. Under EHRP-Settlement /sub project is defined using combination of criteria including the following: administrative boundary (such as a ward, or a VDC), name of the village/place (such as Tole)/ community, natural or topographical boundary, and contiguity. Former Village Development Committees (VDCs) are restructured as Rural Municipality/Municipality according to new restructure federal system of Nepal.

The sub-project settlement- *Tallo Mati* lies in Ward Number-5 of Bhimeswor Municipality (BM) at an altitude of 1400m asl. The settlement is accessible through 2.7 Km earthen road via; Charikot-Manthali Highway. The Tallo Mati village lies in hilly region, on the flat part of cultivated slope having southwest aspect. The total number of earthquake affected HHs identified in the settlement is 67 (Annex- 2: List of beneficiary HHs).

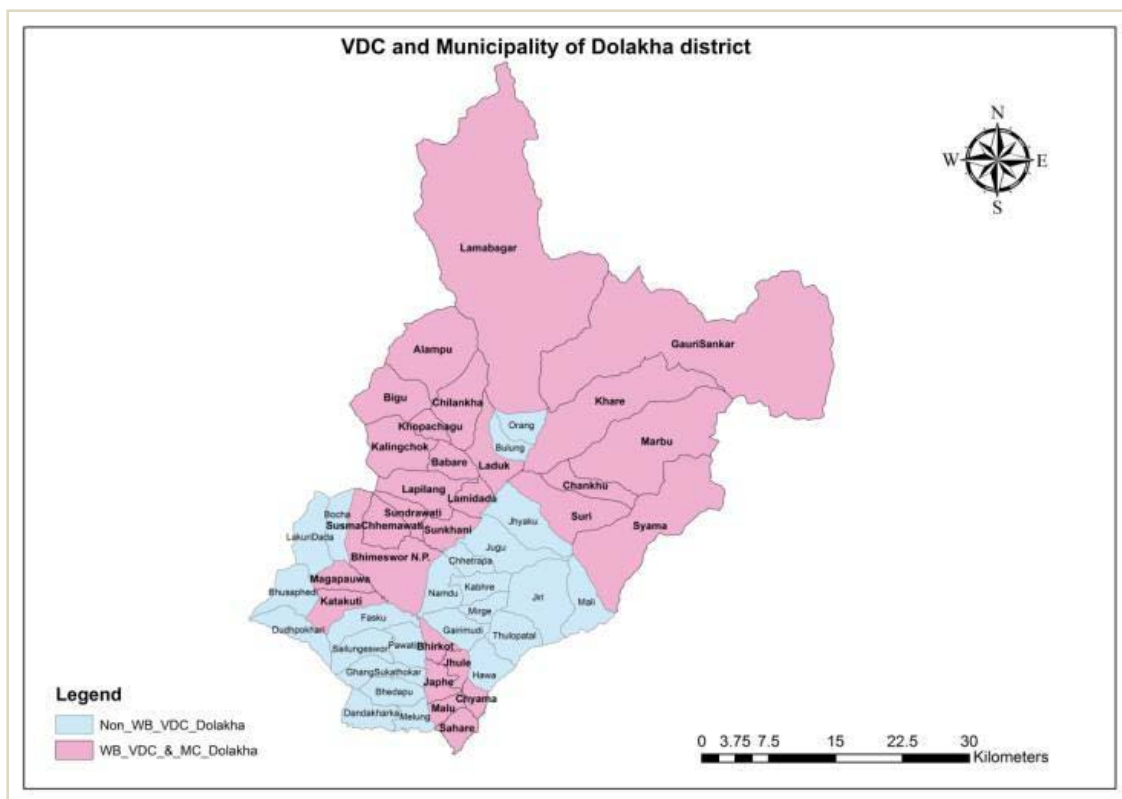


Figure 1: VDCs and Municipalities in Dolakha District

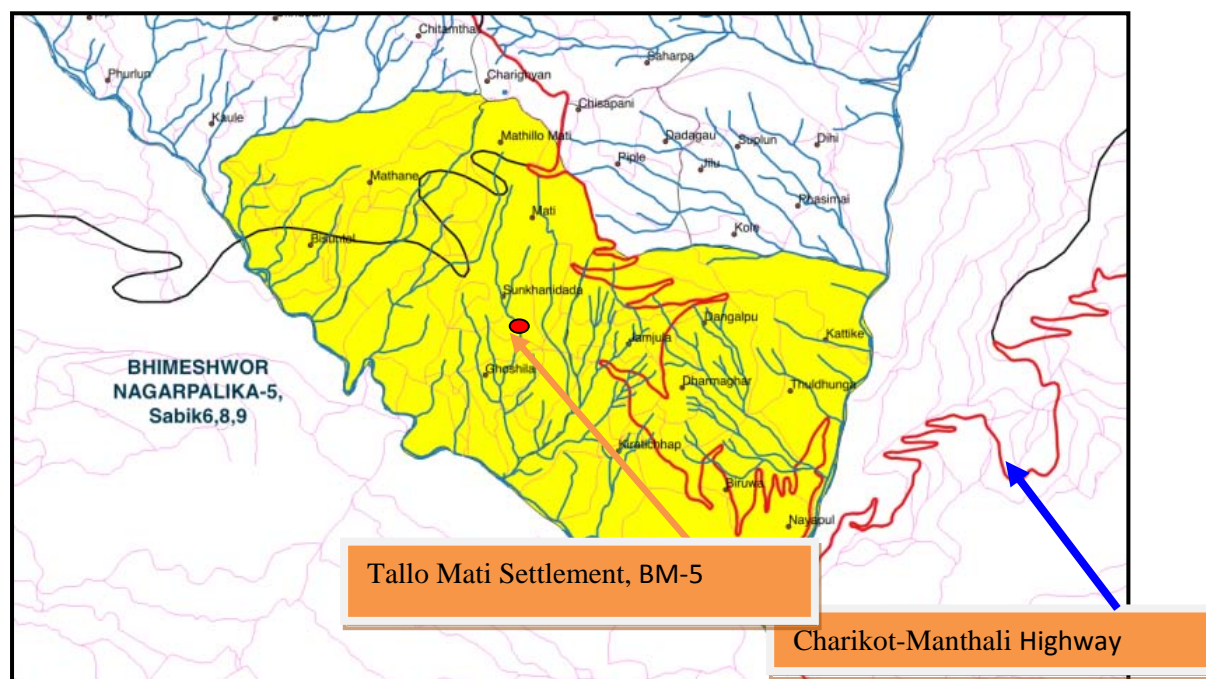


Figure 2: Location of Tallo Mati Settlement (Bhimeshor MC-5)

Physiographical condition of the subproject area (Tallo Mati) is characterized by hill with tropical climate, surrounded by *Bich Chaur* Community Forest in the sub-project area.

4. Social and Environmental Screening and its Objectives

ESMF requires Environmental and Social screening of each subproject/ settlement. The objectives of Screenings are:

- To identify potential environmental and social issues/risks related to the subprojects and its activities (physical, biological, social-cultural issues/risks specific to the area, in and around the settlement),
- To identify the need to obtain any regulatory clearances such as from Ministry of Forest and Soil Conservation (MoFSC) for specific site/s like clearing/felling of trees, from District Coordination Committee (DCC), M/RM for approved quarry sites etc,
- To check if the proposed location and activity meets the exclusion criteria,
- To establish the need to carry out any further investigation/survey/ assessment for preparation of safeguard document like ESMP, Resettlement Action Plan (RAP), Vulnerable Community Development Plan (VCDP) or any specific study and to provide guidance regarding environmental and social requirements and steps that needs to be taken for addressing identified issues., and
- To explore opportunities for creating linkage for enhancing benefits, building better and synergy.

5. Methodology

- Desk study: Documents such as district profile, VDC profile, CBS publication and publication of line agencies at district level and other project related reports were reviewed. Aid of topographic maps of scale 1:25000 and regional geological map including google earth map was taken to get the overview of the project area.

- Field visit and consultation: Environmental and Social screening checklist was used (Annex 1) for recording information. Walkover survey for recording information was also carried out at settlement level. Free, prior and informed consultation with beneficiaries and local informants was undertaken on 15 April, 2017. During the consultation, they were informed about the project provisions and information on socioeconomic setting including physical and biological features were recorded. Discussions were also held with district and local sectoral agencies including District Technical Office (DTO), ward secretary of rural municipality, communities' groups-CFUGs and CBO active in sub project.
- Further consultation and discussion were held with and among EHRP Consultants; consultant engineers from Ministry of Urban Development (MoUD), Local Governance and Community Development Programme (LGCDP) Social Mobilizers.

6. Findings and Issues

Following are the findings and potential environmental and social issues and impacts identified by the Environmental and social screening in the settlement/ subproject.

A. Earthquake Damaged Houses and Local Construction Materials

- Earthquake damaged houses are made with stone masonry using local wood frame. Now many beneficiaries are trending towards constructing Reinforced Concrete Cement (RCC) houses in the settlement;
- Stone and timber salvaged are being packed and stored properly and being used for reconstructions of houses;
- Beneficiaries will be rebuilding a total of 67 houses in the same location following recommendation by engineers from Department of Urban Development and Building Construction (DUDBC). Currently beneficiaries are staying in temporary shelters within the settlement. However, reconstruction policy of NRA also permits to rebuild their houses within the district and adjoining ward of Municipality;
- Total demand of timber is approximately 3,278 cft (cubic feet) and stone is 1,340 cum. The details of raw material requirement are presented in Annex 6. Required raw materials like stone, sand, aggregates for building will be purchased from DCC approved quarry site (at the bank of Tamakoshi River near Dholi Khola at about 14 km from the sub-project area). Materials like iron, cement, bricks will be purchased from local markets at Charikot (Annex 6). The details of timber sourcing is elaborated on sub-section Forest and Wildlife.

B. Forest and Wildlife

- Bich Chaur Community Forest with an area of 56 ha. is located towards uphill of Settlement;
- The Community Forest is habitat for mammals like Monkey, Jackal (*Canis aureus*), Porcupine (*Erethizon*), Marten (*Martes flavigula*), Monitor Lizard (*Varnum spp*), Squirrel (*Funambulus spp*) and birds species including Kalij Pheasant, Warbler (*Phylloscopus Spp*), Quail (*Francolinus spp*), Cucu (*Surniculus lugubris*), Swallow (*Hirundo rustica*) and Wild Sparrow (*Passer spp*) are reported in the forest;
- Non-timber forest product (NTFP) and Medicinal plants as Majitho (*Rubia cordofolia*), Bojo (*Acorus calamus*), Chutro (*Berberis*), Titepati (*Artemisia*),

Gooseberry (*Phyllanthus emblica*), and Stinging Nettle (*Urtica doica*) available in the subproject area; and

- Not any protected as well as rare, endangered, threatened flora and fauna are recorded in the Bich Chaur CF.

This community forest (CF) might be under pressure in supplying timber requirement for reconstruction of 67 houses. The Bich Chaur Community Community Forest User Group (CFUG) has already allocated 60 Cft of timber to each HH for reconstruction. CFUG is distributing timber according to management plans of CF limiting the volume within annual sustainable production and safe yield. Timber distribution should be carried out in planned and well managed way following government directives such that impact on the nearby community forest will be minimal.

The requirement of timber will be fulfilled from the quantity salvaged, felling of standing timber trees on farmland owned by the beneficiaries, purchase from local market at Charikot, purchase at subsidized rate distributed by the Timber Corporation of Nepal (TCN), a government owned entity and remaining unfulfilled need from the CF. Therefore impacts on forest due to reconstruction activities is likely to be low or minimal.

C. Debris/Solid Waste Management and Hazardous Materials

- Debris from earthquake damaged houses is being managed by respective owner of the houses in their own backyard open space; and
- Hazardous waste was not reported in the subproject area.

D. Socio-economic and Cultural Features

- The project area is a mixed community where indigenous HHs and other HHs live together;
- Out of the total 67 beneficiary HHs, 53 HHs are Chhetri, 10 HHs belongs to Bhramin caste, 4 HHs are Bhujel and 8 HHs are woman headed among the beneficiaries. (Annex-2, Beneficiary HHs);
- Majority of HHs are engaged in agriculture and livestock, followed by service, foreign, labor work and others (source: community consultation) Paddy, maize, millet and wheat are main production crops;
- All the beneficiaries have traditionally been using firewood as cooking fuel. Use of electricity and Liquefied Petroleum Gas (LPG) for cooking is nominal. Practice of Improved Cooking Stove (ICS) is not observed;
- The distribution pattern of houses in the settlement is scattered; and
- Public health post is located at 45 minutes walking distance from the settlement whereas one lower secondary school located in the settlement.

E. Water and Sanitation

- Water from *Banpale* spring source (within the settlement) and stone spouts are used for drinking purpose in the settlement. Water for drinking was found to be adequate; .and

- Sanitation condition was also found satisfactory at the sub-project settlement. The issue of open defecation was not reported and availability of water for sanitation was found satisfactory.

F. Build Back Better Opportunity

- As the individual residential houses in the settlement/ subproject area are using firewood as the traditional cooking fuel, this project provides an opportunity to build Improved Cooking Stoves (ICS) or bio-gas etc.
- Unless construction of toilet or installation of alternative energy provision is not adopted by beneficiaries the amount allocated as a part of housing grant will not be paid to the beneficiaries;
- Use of alternative energy sources could be promoted through agencies including government and NGOs/ INGOs which are already engaged in these sectors in the district. Such opportunity needs to be further explored and promoted as far as possible.
- DL-PIU/CL-PIU should explore and coordinate with district forest office, district agricultural office, office of small and cottage industries, agricultural and veterinary service center for identifying income generating activities (cattle raising, poultry, off seasonal farming, skill development) for better livelihood opportunities.

G. Any Sensitive Site

There is no known significant physical cultural site, and no protected site in the immediate surroundings of the subproject/ settlement. There is no known habitat for endangered, rare, protected or special species.

7. Environmental and Social Mitigation Measures and Monitoring Activities

The following are (presented in table 1) Environmental and Social issues and mitigation measures identified from screening report.

Table-1: Environmental and Social issues, impacts and mitigation measures.

| SN | Environmental and Social Issues | Mitigation Measures | Mitigation Measure Cost | Responsibility | | Remarks |
|----|---|---|---|-----------------------|--|---------|
| | | | | Implementation | Supervision | |
| 1. | Impacts from the supply and purchase of construction materials (aggregates, stone and sand) from local market on the local community | <p>Aggregates will be purchased from suppliers or at market (Charikotbazzar). Quarry operators supply the materials from approved quarry sites which are near to Tamakoshi and Dholi Khola about 14 Km away from settlement. District Coordination Committee (DCC) former District Development committee (DDC) is the licensing authority for the quarries, and is responsible to monitor the licensed quarry sites and enforce compliance to environmental mitigations.</p> <p>Timber will be sourced from demolished house salvage, from own farm land, distributed from government relaxation quota (in this case;60 cft/HHhas already been distributed from Bich Chaur CF) and from licensed local market. The timber Corporation of Nepal (TCN), a government entity, also supplies additional timber to local market of</p> | Contractor will be responsible to borne mitigation cost as a part of quarry site license approval clause. | Beneficiary HH/DL-PIU | <p>Monitoring by CL-PIU/mobile team and Third party.</p> <p>Monitoring findings will be shared with DCC.</p> | |

| SN | Environmental and Social Issues | Mitigation Measures | Mitigation Measure Cost | Responsibility | | Remarks |
|-----|--|---|--|------------------------------|--|--|
| | | | | Implementation | Supervision | |
| | | the earthquake affected district. | | | | |
| 2. | Forest and Wild life | The impact on forest is identified to be minimal as discussed earlier as such the impact on wildlife will be unlikely and insignificant. | Not applicable | Beneficiary Household/DL-PIU | Monitoring by CL-PIU/Mobile team and Third Party. Monitoring findings will be shared with DCC | |
| 3. | The construction of small residential buildings will involve small scale civil works. Hence, there is health and safety risks of minor accidents and injuries. | Various training and awareness activities will be organized by DL-PIU, health and safety training and awareness is part of those training and awareness by DL-PIU. Masons and carpenters will be trained on relevant safety measures, and owners will be made aware of the safety risks and management. | The cost of health and safety awareness and training is internalized within the overall cost of training and awareness. Project Implementation Unit (PIU) as a part of annual work plan will develop environmental and social training, awareness and dissemination plan and cost/ budget. | DL-PIU | CL-PIU/NRA | |
| 4. | Build Back Better Opportunity – enhancement measures | | | | | |
| 4.1 | Health and sanitation | Further promote sanitations beyond satisfactory level, renewable energy | Housing construction support of NRs 25,000 | Beneficiary HH/DL-PIU | Monitoring CL-PIU/mobile | Monitoring cost is covered under overall |

| SN | Environmental and Social Issues | Mitigation Measures | Mitigation Measure Cost | Responsibility | | Remarks |
|-----|---|--|---|---|-----------------------------|--|
| | | | | Implementation | Supervision | |
| | | (including solar power, Improved Cooking Stoves (ICS) or bio-gas etc. | | | team/CL-PIU/and third party | project site visit, supervision and monitoring. External monitoring (third party) for overall EHRP is estimated to be about NRs. 7 million. |
| 4.2 | Indigenous Peoples and other vulnerable groups including marginalized, poor, woman headed households, disabled people | <p>Mitigation measures include:</p> <ul style="list-style-type: none"> • Targeted communication and awareness to vulnerable group(e.g. organizing consultation in areas accessible for women and people with disabilities.) on: <ul style="list-style-type: none"> ○ Information about the project, grant, training opportunities ○ Awareness campaign on indoor pollution and its health effects • Target vulnerable groups, ethnic minority while providing trainings to construction workers, supervisors, social mobilisers; • Target female-headed households and other vulnerable groups during social mobilization process and provide them with additional | This will not require additional mitigation cost. | DL-PIU/Mobile team/ Partner organisations (The team will ensure that vulnerable groups are targeted and their participation in ensured through district project team mobilization) | Monitoring by CL-PIU/NRA | The Government/Project is drafting a guideline for Vulnerable Community Support Package equivalent to NRs 50,000 for vulnerable households to be provided through partner organisations. The project (NRA) including the district team will coordinate with NGOs/INGOs and donor partners to provide the package to the vulnerable groups in the concerned |

| SN | Environmental and Social Issues | Mitigation Measures | Mitigation Measure Cost | Responsibility | | Remarks |
|-----|---------------------------------------|--|---|----------------|-------------|---|
| | | | | Implementation | Supervision | |
| | | <p>technical assistance during construction period (masonry, carpenters, etc.); and</p> <ul style="list-style-type: none"> • Ensuring their participation during consultation process throughout project implementation cycle; • Provide additional assistance in accessing housing grants (e.g.-facilitate opening bank account, paperwork for installments/tranche, etc.) | | | | <p>settlement</p> <p>Monitoring cost is covered under overall project site visit, supervision and monitoring. External monitoring (third party) for overall EHRP is estimated to be about NRs. 7 million.</p> |
| 4.3 | Other build back better opportunities | Coordination and linkages with other line agencies including government and NGOs/ INGOs which are already engaged in these sectors in the district. | This will not require additional mitigation cost beyond the cost of coordination. | DL-PIU | CL-PIU/NRA | Agencies working in different sections are being identified and will be listed in as separate Annex. |

8. Conclusions and Recommendations

The conclusions on the environmental and social issues are;

- Sub-project activities will not have significant impact on protected area/protected species/habitat, social, cultural, archeologically sensitive areas in and around the settlement/ subproject area;
- Housing construction will be owner driven. Health and safety aspects of house reconstruction will be addressed by the training and awareness to be carried out by the DL-PIU, and by the mobile team (consisting of engineers, environmental and social persons);
- Timber, stone and other construction materials will be purchased from nearby local market at Charikotbazaar. Besides use of timber from own farmland, distributed volume according to government relaxation quota (from and Bich Chaur CF) and purchase from Timber Corporation of Nepal (TCN) will fulfil the demand. Therefore, impact on forest will be low or minimal;
- Out of the total 67 residential houses not any HHs are in the influence zone of natural hazards as flood or landslide;
- As people of Tallo Mati have their own land for reconstruction of houses, land acquisition and involuntary settlement in not required; and
- There will be no significant adverse impacts on vulnerable groups, marginalized groups (female-headed households and indigenous peoples groups).

The environmental and social impact identified from the reconstruction activity in this settlement is envisaged as minimal or low and no significant adverse impact is foreseen. Owners will purchase the raw material requirement such as aggregates and timber from quarry and local market. The potential impacts and mitigations are summarized in Table -1. There is no need for further Environmental Assessment.

Furthermore, the sub-project does not entail land acquisition or involuntary resettlement thus RAP is not required. In relation to presence of IPs, the screening and community consultation suggests that the project area is a mixed community where indigenous households and other households live together. The indigenous HHs are scattered within the settlement and they do not have collective attachment to the area. Thus, a separate VCDP is not required. Measures to ensure that the vulnerable groups including indigenous peoples are not excluded during project implementation and they are able to maximize benefits from the project are discussed in Table -1.

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Annexes**Annex 1: Environmental and Social Safeguard Screening Checklist at Settlement Level**

| | | |
|----|---|--|
| 1. | Project Title | Earthquake Housing Reconstruction Project (EHRP) |
| 2. | Project District | Dolakha |
| 3. | Name of the VDC/Municipality | Bhimeshwor Municipality (BM-5) |
| 4 | Name of the Settlement, Ward No. | Tallo Mati -5 |
| 5 | Number of eligible households: | 67 HHs |
| 6 | Altitude of the Settlement (in meters) | 1400 m |
| 7 | Nearest road head/highway/headquarter | Charikot- Manthali Highway around 2.7 Km from the settlement |
| 8 | Settlement ID/no | DOL/BM-5/Tallo Mati |
| 9 | Proposed Date of Commencement of Work: _____ | April 15, 2017 |
| | Number of houses damaged | 67 |
| | Number of houses to be reconstructed | 67 |
| | Quantity of debris generated (by type) | Not observed |
| | Quantity of reusable materials (by type) | Stone (2,010 Cum), Timber (1,404 cubic feet.) in total(67 houses) |
| | Quantity of debris that needs to be | People have already managed the debris at their |

| | | |
|----|---|--|
| | disposed | backyard safely. |
| | Quantity of construction materials needed (Timber, sand, gravel, stone, etc) | Timer-3,278 cubic fit, (approx.) soil 3,400 m ³ , stone 1,340 m ³ (calculated as per guideline of SMC 2.1 MoUD, DUDBC) |
| | Any hazardous materials mixed with debris (e.g. from damaged health-posts, medicines, from agro-vet shops/ service etc) | None: (all damage material is residential houses/ no medical shops. No hazardous materials/pesticides were found). |
| 10 | Exclusion criteria: | |
| | Shelter/house should not be located in the risky spots (having ground slope of more than 30 degree, known flood risk spot, on top of or adjacent to known fault-line, etc). | No any major risk observed on the settlement |
| | House/ shelter should not be located in protected area, and forest. | There is no protected area in sub project vicinity |
| | Any activity, including material quarrying, resulting significant conversation or degradation of critical natural habitat is not permitted | Not any |
| | Use of any public PCR in private home reconstruction is not permitted. | Not any |

| S. No | ISSUES | YES | NO | DO NOT KNOW/remarks |
|-------|--|-----|----|---------------------|
| 1 | Is the proposed sub-project likely to have minimal or no | √ | | OP 4.01 |

| | | | | |
|----|--|---|-----------------|---|
| | adverse environmental impacts? | | | Category C |
| 2 | Is the proposed subproject likely to have adverse environmental impacts that are site specific; few if any of them are irreversible, and mitigation measures are readily known or can be designed? | | √ | OP 4.01 Category B |
| 3. | Is the proposed subproject likely to have adverse impacts on the health and quality of forests or rights and welfare of people and their level of dependence upon or interaction with forests? Is the proposed subproject likely to bring about changes in the management, protection or utilization of natural forests or plantations? | | √ √ | OP 4.36 No adverse impact is expected. No changes in conservation of forest, however due to additional utilization minor impact is expected. |
| 4 | Will the sub-project be supporting reconstruction, management, or preservation of physical cultural resources? Is the subproject located in, or in the vicinity of, cultural sites? Will the sub-project likely adversely impact physical cultural resources? ¹ | | √ √ √ | OP 4.11 |
| 5. | Will the sub-project involve significant conversion or degradation of critical or non-critical natural habitats? ² | | √ | OP 4.04 |
| 6 | Does the sub-project involve involuntary land acquisition or prior acquisition of land or demolition of existing structures? | | √ | OP 4.12 |
| 7 | Are there any ethnic minority communities present in the project area and are likely to be affected by the proposed sub-project? | √ | | OP 4.10 4 Bhujel HHs belongs to |

¹Examples of physical cultural resources are archaeological or historical sites, including historic urban areas, religious monuments, structures and/or cemeteries particularly sites recognized by the government.

²Critical natural habitats include those habitats that are legally protected, officially proposed for protection, identified by authoritative sources for their high conservation value, or recognized as protected by traditional local communities.

| | | | | |
|--------------------------|--|---|---|---|
| | | | | ethnic minority |
| Physical features | | | | |
| 1 | Is the settlement/subproject located in an area susceptible to landslides, rock fall or erosion, flood prone areas and extreme climatic conditions, fogs, avalanche, snow-fall, etc? (show in map) | | √ | |
| 2 | Is the settlement located close to groundwater sources, springs, surface water bodies, riverbank, and watercourses? | √ | | <i>Banpale</i> spring source and is being used for drinking purpose. Tamakoshi river is at 14 Km from the project settlement where the sub-project activities will not have any direct impact |
| 3 | How is the terrain? –flat, ridge, undulating, terraced, valley, tar etc. | √ | | Terraced and Tar |
| 4 | Any history of erosion, flashflood, landslides, earthquake in the area/ vicinity? | | √ | |
| 5 | Current land use practice (agriculture, grazing, barren, forest, shrubs-----) | √ | | Agriculture, grazing and forest |
| 6 | Is the subproject located on prime agricultural land? | | √ | Houses are being built where they were previously |
| 7 | Does the sub project involve significant extraction, diversion or containment of surface or ground water for the local people or agriculture? | | √ | |

| | | | | |
|----------------------------|--|---|--------|--|
| 8 | Any existing/approved/ potential quarry sites (sand, aggregate, stone, slates, boulders) in the vicinity of the sub-project? | √ | | Approved quarry site at the bank of Tamakoshi River near Dholi Khola at about 14 km from the sub-project area. |
| 9 | Are there any potential sites/land for debris management/ solid waste management/ reclamation for future use? | | √ | |
| 10 | Are there any areas or features of high landscape or scenic value on or spots with unique feature in and around the location which could be affected by the project? (examples, viewing point/ ridge/ peak, water-fall, cave, cliff etc) | | √ | |
| 11 | Any risks (health and safety, location- cliff, ridge etc.) associated with the setting of the sub-project which needs to be taken care? | | √ | |
| Biological features | | | | |
| 1 | Any critical habitat or ecosystem of importance? Is the subproject located in or adjacent to a protected areas/ national forests, wilderness areas, wetlands (Ramsar), biodiversity, critical habitats? | | √ √ | |
| 2 | If the subproject is located near the forest, what is the category of the forest- national, community, leasehold, religious etc.? | √ | | Bich Chaur Community Forest- having area of 56 hectare is located towards uphill from the settlement |
| 3 | Any area/ spot in and around the subproject/ settlement that is known as/for wildlife/ bird habitat (examples – bear, langur monkey, red panda, deer, trees where vulture or bats nests, cliff where wild beehives,etc) | √ | | Occasional visit in this forest area such as Monkey, Jackal, Porcupine |

| | | | | |
|---|--|---|---|--|
| | | | | ,Squirrel, Monitor Lizard Mongoose and Marten |
| | Is the settlement/ subproject area a known wildlife movement/ migration route or bird migration route? | | √ | It is no known migration route |
| | Is there any water body, river, wetland etc known as important habitat (or renowned) for fishes or aquatic life? Any Ramsar site in the vicinity of the settlement/ subproject? | √ | √ | Though fishing activities were reported in Tamakoshi river, it is not located near the settlement. It is not a Ramsar site |
| | Would the sub-project potentially cause adverse impacts to habitats (e.g. modified, natural, and critical habitats) and/or ecosystems and ecosystem services? | | √ | |
| | Does the Project involve changes to the use of lands and resources that may have adverse impacts on habitats, ecosystems, and/or livelihoods? | | √ | |
| 6 | Are there any areas/ spots used by the protected, important sensitive species of flora and fauna for breeding, nesting, foraging, resting and for migration? | | √ | |
| 7 | Would Project activities pose risks to endangered species or their habitat? | | √ | |
| 8 | Does the sub-project implementation leads to harvesting of natural forests, timber, plantation development, or deforestation? | √ | | Quantity of Timber needed for reconstruction (will be used from Bich Chaur CF) but not significant risk identified |

| | | | | |
|---|--|---|---|--|
| 9 | Any NTFP or medicinal plants in and around the sub-project? | √ | | Majitho, Bojo, Chutro, Titepati, Aamala and Sisnu are available in the subproject forest |
| Socio-economic and Cultural Features | | | | |
| 1 | Is the subproject located in a densely populated area? | | √ | |
| 2 | How many people comprise a typical household? | √ | | 5 individual per HHs on an average |
| 3 | How many households are without any land/shelter, any squatters? | | √ | |
| 4 | Is the subproject located near to the sites of archaeological/historical or cultural importance? | | √ | |
| 5 | Presence of minority/vulnerable/indigenous population in the area? | √ | | Women headed HHs and IP HHs (Bhujel) |
| 6 | Is the sub-project located near cultural or religious place of importance including sacred hill/ peak, sacred cliff, cave and/ or sacred tree? | | √ | Such types of place is not located in the sub-project area |
| 7 | What household and livelihood support activities typically take place within the affected community? | The main livelihood pattern of people are agriculture, job, remittance and labor works | | |
| 8 | What are the typical building practices of the affected people and what are the different materials have they used in the past? | With 2 story traditional building practice of affected people (Like stone, soil and timber) | | |
| 9 | Will the project require displacement or relocation of | | √ | |

| | | | | |
|----|---|---|---|--|
| | persons in the affected area? | | | |
| 10 | Who are the vulnerable people in the population, also considering those affected by HIV/AIDS etc.? | √ | | Woman Headed Houses and IPs |
| 11 | What is the current availability of water for drinking and personal hygiene, | √ | | Adequate Supply of drinking water. Sanitation condition is satisfactory. |
| 12 | What is the current provision of social/infrastructure facilities (health posts, sub-health posts, schools, communications, road etc?) | √ | | Access of earthen Road, School and health post in 3 km periphery from the core settlement area |
| 13 | Are there any roads on around the location which causes congestion, environmental problems during project implementation? | | √ | |
| 14 | Are there any open space, industries, recreation areas which could be affected by the project? | | √ | |
| 15 | Are there any women headed HH (No. of HHs to be identified) in the settlement. | √ | | 8 HHs |
| 16 | Are there any conflicts about the use of local resources | | √ | No any conflict were reported |
| | What are the programs/ activities ongoing or planned in the settlement/ VDC or subproject area that may be coordinated, linked, and/or worked together for synergy and for 'building better'? Examples: Biogas, improved smokeless stoves, sanitation, micro-hydropower, catchment area/ soil erosion protection, community forest, buffer zone management, trail development, agriculture, composting, flood protection, river training, etc?) | √ | | Masson training has been organized by the NSET and 4 person benefited from this programme at the settlement. Agencies |

| | | | | |
|--|---|--|---|---|
| | | | | working in different sections are being identified and will be listed in as separate Annex. |
| | Identification of 'no go' or 'do not disturb' area/ spots/ features based on hazards potential, protected or protection worthy area, common resources, and cultural values. | | √ | |
| | Customized minimum requirements for the subproject/ settlements | Sought preference for alternative source of timber rather than relying on community forest. Ensure that construction materials were from approved sites. | | |
| | Identify programs/ activities for coordination and linking for 'building better' and / or synergy. | Need to coordination and link with district level program implemented in ICS, sanitation program, forest, mason training, commercial agriculture and livelihood enhancement program including utilization of available NTFPs | | |

Screening Conclusions:

(i) Main environmental issues are:

- Potential environmental impacts on Bich Chaur community forest due to demand of timber and impact due to raw material sourcing such as stone, sand and aggregates from quarry sites is envisaged likely to be low or minimal.

(ii) Permits/ clearance needed are:

- Permits from DFO /CFUGs for distribution of timber from community forest to earthquake affected household as provisioned by GoN Rules and Guidelines; and
- Ensure that the quarry operator hold required permits from Rural Municipality/DCC.

(iii) Main social issues are:

- Out of 67 houses 53 are Chhetri, Brahmin 10, 4 are IP HHs (Bhujel) and 8 houses are woman headed houses.

- Any social issues of significant concern were not identified at the sub-project settlement
- (iv) **Land acquisition and involuntary resettlement (permanent or temporary) if any**
 - Land acquisition and involuntary resettlement is not need.
- (v) **Need for any special study**
 - No needed any specific study about subproject area.
- (vi) **Preparation ESMP**
 - Environmental and social impacts are nominal. Therefore, no need of ESMP..
- (vii) **Need for IPDP/VCDP**
 - The project area is a mixed community where indigenous households (4 HHs) and other households live together. Other vulnerable groups (woman headed and indigenous HHs) are also present in the area. These indigenous HHs are scattered within the settlement and do not have collective attachment to the area. Thus, a separate VCDP is not required.
- (viii) **Need for IEE or EIA:**
 - Not Applicable
- (ix) **Any other requirements/ need/ issue etc:**
 - Not Applicable

Annex 2: Name List of Beneficiary with Details in Current Agreement

| S.N | Name list of Eligible HHs | Sex | Address | IPs/Vulnerable/Landless/Ethnic Minority | Nissa No. |
|-----|---------------------------|--------|------------|---|-----------|
| 1 | Kopila Dahal | Male | Talla mati | | 7,151 |
| 2 | Buddhi Bahadur Dahal | Male | Tallo mati | | - |
| 3 | Bhairav Dahal | Male | Tallo mati | | 7,152 |
| 4 | Lalait Bahadur Dahal | Male | Tallo mati | | 7,154 |
| 5 | Bal Bahadur Thapa | Male | Tallo mati | | 7,155 |
| 6 | Bhim Bahadur Subedi | Male | Tallo mati | | 7,156 |
| 7 | Indra Bahadur Khatri | Male | Tallo mati | | 7,156 |
| 8 | Narayan Bahadur K C | Male | Tallo mati | | 7,158 |
| 9 | Janardan K C khatri | Male | Tallo mati | | 7,159 |
| 10 | Balkrishna Khatri | Male | Tallo mati | | 7,161 |
| 11 | Nahakul K C | Male | Tallo mati | | 7,162 |
| 12 | Krishna Maya Khatri | Female | Tallo mati | Female Headed | 7,163 |
| 13 | Binod Khatri | Male | Tallo mati | | 7,164 |
| 14 | Balram Basnet | Male | Tallo mati | | 7,166 |
| 15 | Babukaji Basnet | Male | Tallo mati | | 7,167 |
| 16 | Janak Bahadur Basnet | Male | Tallo mati | | 7,169 |
| 17 | Arjun Bahadur Basnet | Male | Tallo mati | | 7,208 |
| 18 | Ramji Basnet | Male | Tallo mati | | 7,171 |
| 19 | Krishna Bahadur Basnet | Male | Tallo mati | | 7,174 |
| 20 | Ram Sharan Khatri | Male | Tallo mati | | 7,175 |
| 21 | Maan Kumari Basnet | Female | Tallo mati | Female Headed | 7,177 |
| 22 | Moti Bahadur Basnet | Male | Tallo mati | | 7,178 |
| 23 | Kamal K C | Male | Tallo mati | | 7,180 |
| 24 | Rega Bahadur Khatri | Male | Tallo mati | | 7,181 |
| 25 | Toya Nath Rimal | Male | Tallo mati | | 7,182 |
| 26 | Rajkumar Rimal | Male | Tallo mati | | 7,183 |
| 27 | Dim Bahadur Khatri | Male | Tallo mati | | 7,184 |
| 28 | Gobinda Khatri | Male | Tallo mati | | 7,186 |
| 29 | Bhakta Bahadur K C | Male | Tallo mati | | 7,187 |
| 30 | Chandra Bahadur Sapkota | Male | Tallo mati | | 7,189 |
| 31 | Ratna Kumari Sapkota | Female | Tallo mati | Female Headed | 7,190 |
| 32 | Raj Kumar Sapkota | Male | Tallo mati | | 7,191 |
| 33 | Padam Bahadur Khatri | Male | Tallo mati | | 7,192 |
| 34 | Ram Krishna Bhujel | Male | Tallo mati | IP/Ethnic Minority | 7,195 |
| 35 | Mana Maya Bhujel | Female | Tallo mati | Female Headed/ IP/Ethnic Minority | 7,196 |
| 36 | Gyanu Bhujel | Male | Tallo mati | IP/Ethnic Minority | 7,197 |
| 37 | Kumar Bhujel | Male | Tallo mati | IP/Ethnic Minority | 7,199 |
| 38 | Sunta Maya Khatri | Female | Tallo mati | Female Headed | 7,201 |
| 39 | Navaraj K C | Male | Tallo mati | | 7,202 |
| 40 | Ram Kumar K C | Male | Tallo mati | | 7,203 |
| 41 | Kamal Bahadur Khatri | Male | Tallo mati | | 7,204 |
| 42 | Raj Kumar Khatri | Male | Tallo mati | | 7,205 |
| 43 | Padam Bahadur Khatri | Male | Tallo mati | | 7,206 |
| 44 | Tirtha Bahadur K C | Male | Tallo mati | | 7,207 |

| S.N | Name list of Eligible HHs | Sex | Address | IPs/Vulnerable/Landless/Ethnic Minority | Nissa No. |
|-----|---------------------------|--------|------------|---|-----------|
| 45 | Tara Bahadur Khatri | Male | Tallo mati | | 7,210 |
| 46 | Moti Bahadur Khatri | Male | Tallo mati | | 7,215 |
| 47 | Dhan Kumari Khatri | Female | Tallo mati | Female Headed | 7,217 |
| 48 | Tul Bahadur Khatri | Male | Tallo mati | | 7,218 |
| 49 | Padam Bahadur Khatri | Male | Tallo mati | | 7,219 |
| 50 | Maiya Sapkota | Male | Tallo mati | | 7,220 |
| 51 | Rasham Bahadur K C | Male | Tallo mati | | 7,221 |
| 52 | Devi Kumari Khatri | Female | Tallo mati | Female Headed | 7,222 |
| 53 | Bikram K C | Male | Tallo mati | | 7,223 |
| 54 | Bal Kumari Khatri | Female | Tallo mati | Female Headed | 7,224 |
| 55 | Bikash K C | Male | Tallo mati | | 7,225 |
| 56 | Balram Sapkota | Male | Tallo mati | | 7,226 |
| 57 | Dhruba Prasad Sapkota | Male | Tallo mati | | 7,228 |
| 58 | Vhagirath Sapkota | Male | Tallo mati | | 7,229 |
| 59 | Ramesh Sapkota | Male | Tallo mati | | 7,230 |
| 60 | Baal Bahadur Adhikari | Male | Tallo mati | | 7,232 |
| 61 | Maya Adhikari | Female | Tallo mati | Female Headed | 7,233 |
| 62 | Bal Bahadur Khatri | Male | Tallo mati | | 7,235 |
| 63 | Tara Ghimere | Female | Tallo mati | Female Headed | 7,238 |
| 64 | Badri Bahadur Adhikari | Male | Tallo mati | | 7,239 |
| 65 | Tek Bahadur K C | Male | Tallo mati | | 7,295 |
| 66 | Kanchi Thapa | Female | Tallo mati | Female Headed | 7,306 |
| 67 | Uddab Bahadur Raut | Male | Tallo mati | | 7,311 |

Screening Tool Completed and Reviewed by:

Signed by Environmental Specialist in the District Level -PIU:

Name: Yubaraj Satyal

Title and Date: Environmental Specialist/ 21st April, 2017

Signed by Social Specialist in District Level -PIU:

Name: Chandra Prasad Niroula

Title and Date: Social Development Specialist/ 21st April, 2017

Signed by Project Manager in District Level - PIU:

Name: Nirmal Darshan Acharya

Title and Date: Project Manager

Presentation/ Briefing to DCC – ENRC done on:, 2017

Presentation/ Briefing to DCC – ENRC done on:

Advice, comments, and suggestions from the DCC-ENRC are:..... (Attach details/ minutes).

Screening cleared by DCC – ENRC on: (Any condition and/ or suggestion made as part of clearance?).

Annex 3: List of Consultation

| S.N | Name | Tole | Contact No. |
|-----|----------------------------|------------------|-------------|
| 1 | Balaram Basnet | BMC-5 | |
| 2 | Ram Saran KC | BMC-5 | |
| 3 | Suntala KC | BMC-5 | |
| 4 | Manisha Adhikari | BMC-5 | |
| 5 | Tulasimaya Adhikari | BMC-5 | |
| 6 | Kalpana Budhathoki (Thapa) | Social Mobilizer | 9841185516 |

Annex 4: Photographs



Figure: 1 Earthquake damaged households at downhill of Tallo Mati



Figure: 2 View of Tallo Mati settlement, BMC

Annex 5: Sub project in Google Map

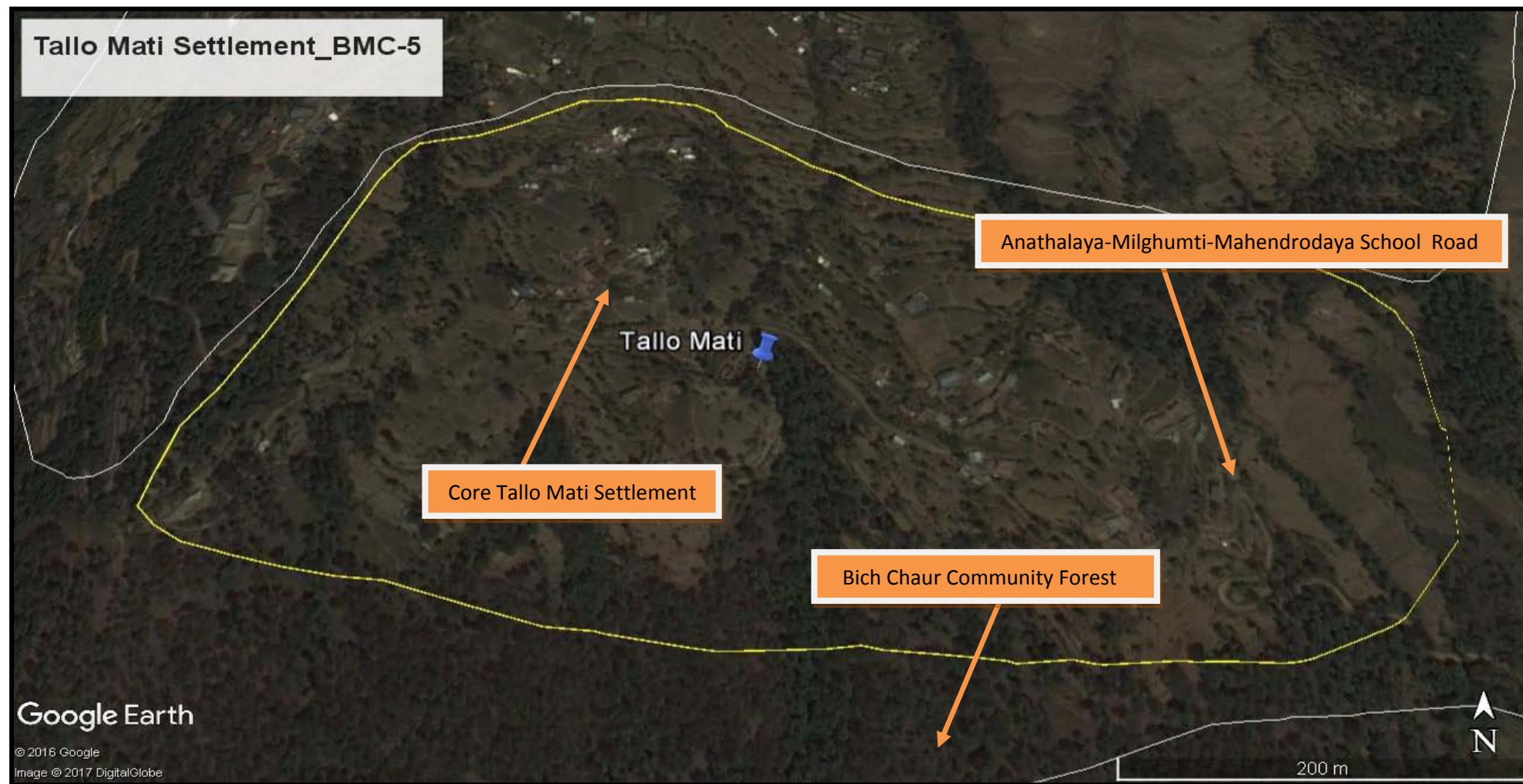


Figure 3: Google Map of Tallo Mati Settlement

Annex -6: Quantity Calculation Sheet

Government of Nepal
Ministry of Federal Affairs and Local Development
District Level- Project Implementation Unit (DL-PIU)
Dolakha

**Type of house: Model no. Stone Masonry
in Cement Mortar (SMC)-2.1**

Reference: MoUD/DUDBC

| S. No. | Structurewise | Materials | | | | |
|--------|---------------------------------|-------------------------|---------------|-----------|----------------|-------------|
| | | Stone (m ³) | Cement (Bags) | Sand (m3) | Aggregate (m3) | Timber (m3) |
| 1 | Upto D.P.C. level | 19 | 82 | 12 | 7 | 0 |
| 2 | Super structure | 31 | 138 | 18 | 7 | 1.18 |
| 3 | Roof | 0 | 0 | 0 | 0 | 0.8 |
| | Total | 50 | 220 | 30 | 14 | 1.98 |
| | Reuse from demolished house | 30 | | | | 0.594 |
| | Additional Needed/House | 20 | | | | 1.386 |
| | Additional Needed for 67 Houses | 1340 | | | | 92.862 |