



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 Marse Dhidakaule Dihipokhari/Settlement: DOL/KRM-9: Kalinchok Rural
Municipality, Dolakha District

Date: 30 August, 2017

Abbreviation

CBS:	Central Bureau of Statistics
CF:	Community Forest
CL-PIU:	Central Level Project- Implementation Unit
DAO:	District Administrative Office
DCC:	District Coordination Committee
DL-PIU:	District Level – Project Implementation Unit
DMG:	Department of Mines and Geology
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
Ha:	Hectare
HURADEC:	Human Rights Awareness and Development Centre
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
LPG:	Liquefied Petroleum Gas
MoFALD:	Ministry of Federal Affairs and Local Development
MoFSC:	Ministry of Forest and Soil Conservation
MoUD:	Ministry of Urban Development
NRA:	National Reconstruction Authority
NRCS:	Nepal Red Cross Society
NSET:	National Society for Earthquake Technology
NTFP:	Non-Timber Forest Product
RAP:	Resettlement Action Plan
RCC:	Reinforced Concrete Cement
RM:	Rural Municipality (<i>Gaupalika</i>)
SM:	Social Mobilizer
TCN:	The Timber Corporation of Nepal
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, Dolkha 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 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. NRA has already finalized the earthquake resilient house construction design parameters. Based on the design parameter DUDBC engineer verifies earthquake resilient house reconstruction and beneficiaries are entitled to receive the tranche payment.
- 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 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-*Marse Dhidakaule Dipokhari* (Herein after *Marse*) lies in Ward Number-9 of Kalinchok Rural Municipality at an altitude of 1800masl. The sub-project settlement is combination of 3 villages *Marse* (16 HHs), *Dhidakaule* (17 HHs) and *Dipokhari* (31HHs). The settlement lies at 27°41'55.40"N latitude and 86° 4'21.79" E longitudes. The settlement is accessible through 0.5 km *Thumka-Pipalbot-Dolti* Gravel road via; Charikot-Singati-Lamabagar Highway. The total number of earthquake-affected HHs identified in the settlement is 64 (Annex- 2: List of beneficiary HH).

Physiographical condition of the subproject *Marse* is characterized by hill and with subtropical climate.

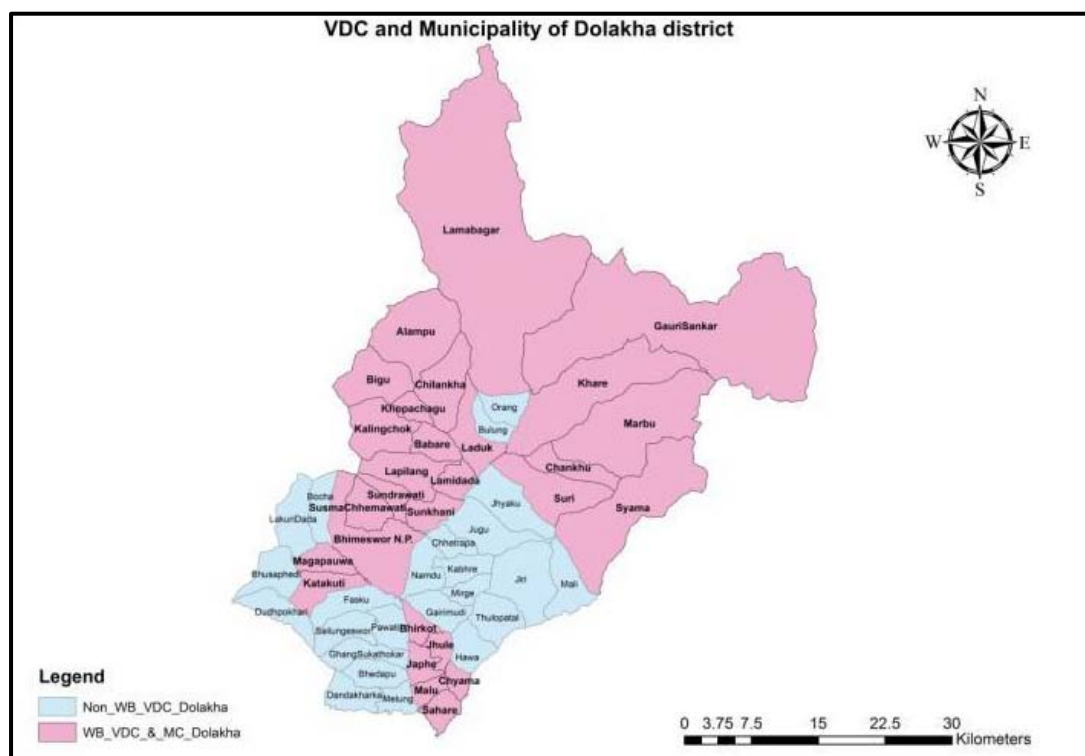


Figure 1: Map showing VDCs/Municipalities of Dolakha

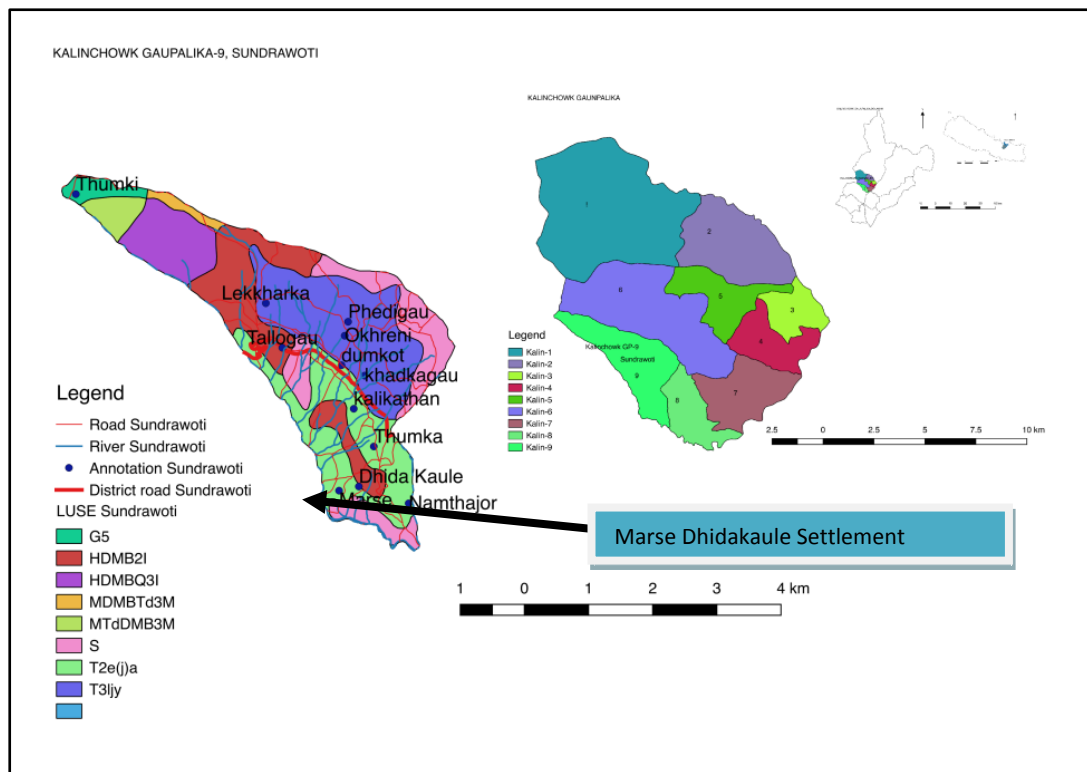


Figure 2: Location of Marse Settlement (Kalinchowk RM-9)

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 Environment and Social Management Plan (ESMPs), 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 I) 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 25 March, 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 were made with stone masonry using local wood frame. Beneficiaries are now trending towards Reinforced Cement Concrete (RCC) construction;
- Beneficiaries are currently staying in temporary shelters within the same settlement area;
- The proposed newly reconstruction houses will be made with stone masonry using cement mortar (SMC);
- 64 beneficiaries HHs are rebuilding their houses in the same location following recommendation made by engineers from Department of Urban Development and Building Construction (DUDBC). However, reconstruction policy of NRA also permits to rebuild their houses within the district and adjoining ward of Municipality;
- Total additional demand of timber is estimated approximately 3,131 Cft (cubic feet) and stone 1,280 cum. The details of raw material requirement are presented in Annex 7;
- All required raw materials for building will be purchased from DCC approved quarry site (at the bank of Tamakoshi River near Singati bazaar at about 17 km from the sub-project area); and
- Materials salvaged (stone, 1920 cum and timber 85.76 cum) are being packed and stored properly and being used for reconstructions of houses.

B. Water Seepage

Water seepage is observed in the head of *Marse* settlement, though it is not caused by the sub-project activities. The seepage had been prevalent before the earthquake (Since 2011) and this phenomenon has been more intense during the rainy season lately. Nine houses are located at the downhill slope at distance of about 100m from the current seepage area. Major geological hazards were not identified in the settlement area as per the geological study report of Department of Mines and Geology (DMG)1. The potential impact in future can be:

- It may pose risk to existing 9 houses of *Marse* sub-project in future; and
- Agricultural and settlement area nearby *Marse* is also affected due to seepage; and

- The impact will be addressed in ESMP prepared at Cluster Level.

C. Forest and Wildlife

- *Payaubote Salleri* community forest (CFs) with an area of 53.17 hectare (ha.) is present towards uphill at about 200m distance from the settlement;
- Chilaune (*Schima wallichii*) is the dominant species of the forest. Other associated species with Chilaune are Uttis (*Alnus nepalensis*) and Salla (*Pinus* spp.);
- Monkey, Marten and Jackal, are wildlife frequently seen in the area with occasional occurrence of Deer;
- Majito, Bojo and Amala are available NTFP/medicinal plants around the subproject area; and
- Not any protected as well as rare, endangered, threatened flora and fauna are recorded in the CF.

Potential pressure on the *Payaubote Salleri* CFs is likely but low for supplying timber requirement (3,131 cft) for reconstruction of 64 houses. The Community Forest User Group (CFUG) has already allocated 20 Cft of timber to each HH for reconstruction. CFUGs are distributing timber according to management plans of CF limiting the volume within annual sustainable production and safe yield (government relaxation quota). 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 Bazaar and Singati Bazaar, purchase at subsidized rate distributed by the Timber Corporation of Nepal (TCN), a government owned entity and remaining unfulfilled need from the CF.

D. 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;
- Solid waste like empty cement bags, metal scarps generated during construction will have minimal impact; and
- Hazardous waste has not been reported or observed in the subproject area. People are currently taking service from the health post which at present is in intact condition following repair of minor cracks due to earthquake.

E. Socio-economic and Cultural Features

- Houses in the settlement are scattered in distribution;
- Out of the total 64 beneficiary HHs, 53 HHs are Brahmin 6 houses are Chhetri and 5 HHs belongs to Indigenous people and 9 are woman headed among the beneficiaries;
- The project area is a mixed community where indigenous HHs and other HHs live together;
- 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 in *Marse*;
- *Setidevi* (Temple) is a religious place is also located in the settlement area; and
- Public health post is located at 1 hours walking distance from the settlement whereas one lower secondary school located in the settlement.

F. Water and Sanitation

- The source of water for drinking facility is spring (through piped) and it is found to be adequate for drinking purpose;
- *Dolti Khola* is located near the settlement. Except for small irrigation facility managed by farmers towards downstream area, this stream is not used by majority of HHs at settlement; and
- Sanitation condition was also found satisfactory at the sub-project settlement; toilet was reported in every houses. These toilets facility range from simple pit type latrine to modern flush type with septic tank.
- However, minimal sanitation standards should be included in new constructions.

G. Build Back Better Opportunities

- Improved water, sanitation and hygiene situation in the settlement by: a) toilet construction using housing grant allocated for sanitation purpose; b) increasing water availability for sanitation;
- 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;
- These 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; and
- DL-PIU/CL-PIU may explore and coordinate with district forest office, rural road projects, water induced disaster management office, Forest and Soil conservation office, Watershed management office etc. for mitigating/ managing the proper drinking water supply and better livelihood opportunities.

H. 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. Feedback from DCC-ENRC, Dolakha

A review meeting on the draft report was held on 27th April, 2017 in DCC hall in presence of various stakeholders including DCC, NRA district office, project manager (Annex-3). The suggestion following the presentation is outlined below:

- Coordination with the Stakeholders (Like District Survey office, District Land Revenue Office, District Forest Office, District Administrative Office(DAO), District Disaster Response Committee (DDRC), DUDBC-DLPIU, NRA for the resettlement/relocation purpose and study;
- Adopt the appropriate method for VCDP and RAP if needed; and
- Incorporate these suggestions in ESMP if required

8. Environmental and Social Mitigation Measures and Monitoring Activities

The following are (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	Aggregates will be purchased from suppliers or at market (Charikot Bazaar & Singati Bazaar). Quarry operators supply the materials from approved quarry sites which are near to Tamakoshi River about 17 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. Timber will be sourced from demolished house salvage, from own farm land, distributed from government relaxation quota (20 cft) and from licensed local market. The timber Corporation of Nepal, a government entity, also supply additional timber to local market of the earthquake affected district.	Contractor will be responsible to borne mitigation cost as a part of quarry site license approval clause.	Beneficiary HH/DL-PIU	Monitoring by CL-PIU/mobile team and Third party. Monitoring findings will be shared with DCC.	Aggregated suppliers and vendors are registered on concerned government authority to have permits to supply and sale the products.
2	Water Seepage	Co-ordinate with district administration office (DAO) and district soil and watershed conservation office and NGOs working in watershed protection sector	Need further assessment	Beneficiary HH/DL-PIU	Monitoring by CL-PIU/mobile team and Third party. Monitoring findings will be shared with DCC.	Will be addressed in Cluster Level ESMP
3.	Forest and Wild life	The mitigation measures regarding impact on forest (timber supply/demand) is already discussed in foregoing cell. Besides, following measures should be adopted while	Not applicable	Beneficiary Household/DL-PIU	Monitoring by CL-PIU/Mobile team and Third Party. Monitoring findings will be shared with	

SN	Environmental and Social Issues	Mitigation Measures	Mitigation Measure Cost	Responsibility		Remarks
				Implementation	Supervision	
		<p>managing timber from forest;</p> <ul style="list-style-type: none"> • Seek for alternative to timber as for example Aluminium Window Pane; • Use trees felled by the wind or other factor, and use trees without disturbing the core forest area, for example trees likely to be lost by landslide, tree along forest path etc; • Fell tree based on density and distribution, do not fell tree from sparse area of the forest; • Undertake plantation of tree along bare area as a part of community forest management plan; • Abide by forest law, regulations and guidelines; and • Impact on wildlife is expected to be minimal 			DCC	
4.	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 (DL-PIU and CL-PIU) as a part of annual work plan will develop environmental and social training, awareness and dissemination plan and cost/	DL-PIU	CL-PIU/NRA	DL-PIU itself is a project implementation unit (PIU)

SN	Environmental and Social Issues	Mitigation Measures	Mitigation Measure Cost	Responsibility		Remarks
				Implementation	Supervision	
			budget.			
5.	Debris/Solid Waste Management	Demolition waste generated is already managed in-situ. The solid waste generated during construction will be minimal and will be managed by beneficiaries themselves	Not applicable	Beneficiaries	DL-PIU	
6.	Build Back Better Opportunity – enhancement measures					
6.1	Health and sanitation	In terms of prioritizing built back better opportunity need priority are: <ol style="list-style-type: none"> 1. Integration of toilet (sanitations) construction in housing reconstruction 2. Addressing Indoor air pollution through well ventilated housing design including promotion of Improved Cooking Stoves (ICS) 3. Renewable energy (including solar power, or bio-gas etc . 	Housing construction support of NRs 25,000	Beneficiary HH/DL-PIU	Monitoring CL-PIU/mobile team/CL-PIU/and third party	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.

SN	Environmental and Social Issues	Mitigation Measures	Mitigation Measure Cost	Responsibility		Remarks
				Implementation	Supervision	
6.2	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"> ○ Awareness on efficient usage of water and WASH ○ Awareness campaign on indoor pollution and its health effects ○ Information about the project, grant, training opportunities • Target vulnerable groups 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 technical assistance during construction period (masonry, carpenters, etc.); and • 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.) 	This 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	<p>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 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>

SN	Environmental and Social Issues	Mitigation Measures	Mitigation Measure Cost	Responsibility		Remarks
				Implementation	Supervision	
6.3	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.	DL-PIU	CL-PIU/NRA	Agencies working in different sections will be identified and listed in Annex

9. Conclusion 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 Singati and Charikot Bazaar. Besides use of timber from own farmland and community forest (Kalila and Panipokhari CF), distributed volume according to government relaxation quota and purchase from Timber Corporation of Nepal (TCN) will fulfill the demand. Therefore, impact on forest will be low or minimal.
- Out of the total 67 residential houses 9 HHs are in the influence zone of water seepage while other natural hazards as flood or landslide are not likely in the settlement;
- As people of *Marse* have their own land for reconstruction of houses, land acquisition and involuntary settlement is 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 envisaged 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 timber and aggregates 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. They have same socio-economic and educational status with other caste groups. The vulnerable households are benefited from the EHRP project and they do not have any adverse impact from it. Besides housing grant they are entitled to get 50,000 top up subsidy (See table-1). 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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Date: 12th April, 2017

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Date: 27th April, 2017

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	Kalinchok Rural Municipality-9 (former Sundrawati-1)
4	Name of the Settlement, Ward No.	Marse Dhidakaule Dipokhari KRM-9
5	Number of eligible HHs:	64 HHs
6	Altitude of the Settlement (in meters)	1800m
7	Nearest road head/highway/headquarter	<i>Thumka-Pipalbot-Dolti</i> road 500m
8	Settlement ID/no	DOL/KRM-9/Marse Dhidakaule
9	Proposed Date of Commencement of Work:	March 25, 2017
	Number of houses damaged	64
	Number of houses to be reconstructed	64
	Quantity of debris generated (by type)	Stone, bonding soil, wood, rags
	Quantity of reusable materials (by type)	Stone (1,920 m ³), Timber (1,342 cft.) as per the approximate estimation
	Quantity of debris that needs to be disposed	Stone, bonding soil, wood, rags(people have managed at their backyard)
	Quantity of construction materials needed (Timber, sand, gravel, stone, etc)	Timber- 3,131 cu. ft., Stone 1,280 m ³ (approximately)
	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).	There is not any risk in zone observed		
	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. N o	ISSUES	YES	NO	DO NOT KNOW/remarks
1	Is the proposed sub-project likely to have minimal or no adverse environmental impacts?	√		OP 4.01
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 Minor impact on community forest
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 It is not attracted but the impact of forest is already addressed in OP 4.01 above
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? ²		√ √ √	OP 4.11

²Examples 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.

5.	Will the sub-project involve significant conversion or degradation of critical or non-critical natural habitats? ³		√	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 (Not identified)
7	Are there any ethnic minority communities present in the project area? Are they adversely impacted by the proposed sub-project?	√	√	OP 4.10 IPs are present
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)	√		The existing water seepage might result in soil erosion
2	Is the settlement located close to groundwater sources, springs, surface water bodies, riverbank, and watercourses?	√		Dolti Khola is located near the settlement
3	How is the terrain? –flat, ridge, undulating, terraced, valley, tar etc.	√		Terraced
4	Any history of erosion, flashflood, landslides, earthquake in the area/ vicinity?	√		According to local people Since 2011, active water seepage
5	Current land use practice (agriculture, grazing, barren, forest, shrubs-----)	√		Agriculture, grazing fallow and forest
6	Is the subproject located on prime agricultural land?		√	
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?	√		DCC approved quarry site is at the bank of Tamakoshi River near Singati bazaar at about 17 km from the sub-project area).

³ Critical 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.

9	Are there any potential sites/land for debris management/ solid waste management/ reclamation for future use?		√	People have managed debris from damaged houses at their backyard
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?		√	Such types of place is not noted in the subproject area
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.?	√		<i>Payaubote</i> Community Forest with an with an of area 53.17 Ha and dominated by <i>Chilaune</i> is located towards uphill from the sub-project 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)	√		Frequent visit in this forest area by mammals like Monkey, Jackal and Marten
	Is the settlement/ subproject area a known wildlife movement/ migration route or bird migration route?		√	Migratory animals are not reported in the sub-project area

	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?		√	
4	Would the sub-project potentially cause adverse impacts to habitats (e.g. modified, natural, and critical habitats) and/or ecosystems and ecosystem services?		√	
5	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?		√	Endangered species are not reported in the locality
8	Does the sub-project implementation leads to harvesting of natural forests, timber, plantation development, or deforestation?	√		Harvesting of timber is required
9	Any NTFP or medicinal plants in and around the sub-project?	√		<i>Majito, Bojo, Aamala</i>
Socio-economic and Cultural Features				
1	Is the subproject located in a densely populated area?		√	House in the settlement are scattered in distribution
2	How many people comprise a typical HH?			5 members on average
3	How many HHs are without any land/shelter, any squatters?		√	
4	Is the subproject located near to the sites of archaeological/historical or cultural importance?	√		Setidevi religious & cultural place located in the settlement area
5	Presence of minority/vulnerable/indigenous population in the area?	√		IPs and women headed HHs

6	Is the sub-project located near cultural or religious place of importance including sacred hill/ peak, sacred cliff, cave and/ or sacred tree?		√	Setidevi Temple is a religious place but of no regional and national importance
7	What HH and livelihood support activities typically take place within the affected community?	The main livelihood pattern of people are Agriculture, 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 (Like stone, Mud, wood but now beneficiaries are constructing modern types RCC houses		
9	Will the project require displacement or relocation of persons in the affected area?		√	Not any
10	Who are the vulnerable people in the population, also considering those affected by HIV/AIDS etc.?	√		Woman headed and IP HHs
11	What is the current availability of water for drinking and personal hygiene,		√	Good supply of drinking water
12	What is the current provision of social/infrastructure facilities (health posts, sub-health posts, schools, communications, road etc?)	√		Access of gravel road, school and health post
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.	√		9 HHs
16	Are there any conflicts about the use of local resources		√	

<p>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,</p>	<ul style="list-style-type: none"> • Mason training is provided by NSET-Dolakha to 5 people. • Human Rights Awareness and Development Centre (HURADEC) and Nepal Red Cross Society (NRCS) are working on soil conservation and ICS. as far as possible in future; and • Need to identify potential programs includes; Commercial agriculture system, ICS, Sanitation, and mason training and such
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	agriculture, composting, flood protection, river training, etc?)	opportunity needs to be further explored and promoted.		
	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	<ul style="list-style-type: none"> • Timber, building stone, mason and easy access for material transport • Properly manage remaining demolition waste/debris during housing reconstruction; • Adoption of proper safety measures and due priority to vulnerable HHs during re-construction; • Optimal re-used of salvaged materials; • Further study to build synergy with environmentally friendly and socially acceptable technology; and • Due priority to safety and vulnerable groups during construction 		
	Identify programs/ activities for coordination and linking for 'building better' and / or synergy.	<ul style="list-style-type: none"> • Need for co-ordination with district level line agency including District Administration Office (DAO), Soil and Watershed Conservation Office etc; • Housing construction support of NRs. 25,000 needs to be used as an opportunity to promote sanitations, ICS etc; • Renewable energy including solar power, or bio-gas etc.; and • Identify and co-ordinate with infrastructure development works (eg road upgrading) that are underway as a part of overall reconstruction. 		

Screening Conclusions:

(i) Main environmental issues are:

- Significant environment issues were not identified. Since construction materials such as timber, stone have to be either purchased from local market or brought from DCC approved quarry sites. The requirement of timer will be fulfilled from salvage and additional from local market and through Timber Corporation of Nepal including use of government relaxation quota; and
- Potential adverse impact is not envisaged on the *Payaubote Salleri* Community Forest. Because government relaxation quota based on allowed annual sustainable yield will be utilized for reconstruction; and
- Measures to address the water seepage of *Marse* settlement needs to be included in Cluster Level ESMP to be prepared at Rural Municipality Level.

(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 the total 64 beneficiary HHs, 53 HHs are Brahmin 6 houses are Chhetri and 5 HHs belongs to Indigenous people Thami and 9 woman headed among the beneficiaries;
 - 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 needed. However locations of 9 houses are near the water seepage are at future risk (as per the geological report of NRA).
- (v) **Need for any special study:**
- Special study for seepage control is needed.
- (vi) **Preparation ESMP** Preparation of ESMP is not recommended.
- (vii) **Need for IPDP/VCDP:**
- The project area is a mixed community where indigenous households and other households live together. Other vulnerable groups (female headed HHs and IPs) are also present in the settlement. 5 IPs HHs out of 64 HHs are scattered within the settlement and they do not have collective attachment to the area. They have same socio-economic and educational status with other caste groups. The vulnerable households are benefited from the EHRP project and they do not have any adverse impact from it. Besides housing grant they are entitled to get 50,000 top up subsidy. Thus, a separate VCDP is not required.
- (viii) **Need for IEE or EIA: NA**
- No need for IEE and EIA
- (ix) **Any other requirements/ need/ issue etc:**
- No need to others requirement.

Screening Tool Completed and Reviewed by:

Environmental Specialist in the District Level - PIU: Title and Date: Yubaraj Satyal/ , 12 th April 2017	Social Specialist in District Level - PIU: Title and Date: Chandra Niraula /, 12 th April 2017	Project Manager in District Level - PIU: Title and Date: Nirmal Darshan Acharya /DTO Chief/Project Manager	Presentation/ Briefing to DCC – ENRC done on: 27th April, 2017 Advice, comments, and suggestions from the DCC-ENRC are attached in Annex 7 Screening cleared by DCC – ENRC on: 9 th May, 2017
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Annex 2: Name list of Beneficiary with Details in Current Agreement

S.N.	Name list of beneficiary	Vulnerable HHs(Dalit, IPs and Women Headed HHs)	Sex	Former -Sundrawati-1
1	Nanda Raj Shiwakoti		M	Dhidakaule, KGP-9
2	Krishna Pd. Shiwakoti		M	Dhidakaule, KGP-9
3	Karnananda Shiwakoti		M	Dhidakaule, KGP-9
4	Surya Prasad Shiwakoti		M	Dhidakaule, KGP-9
5	Jaganath Shiwakoti		M	Dhidakaule, KGP-9
6	Kul Prasad Shiwakoti		M	Dhidakaule, KGP-9
7	Punya Prasad Shiwakoti		M	Dhidakaule, KGP-9
8	Subba Shiwakoti		M	Dhidakaule, KGP-9
9	Lal Prasad Shiwakoti		M	Dhidakaule, KGP-9
10	Ganesh Pd. Shiwakoti		M	Dhidakaule, KGP-9
11	Bhim Prasad Shiwakoti		M	Dhidakaule, KGP-9
12	Rabin Shiwakoti		M	Dhidakaule, KGP-9
13	Balaram Shiwakoti		M	Dhidakaule, KGP-9
14	Krishna Pd. Shiwakoti		M	Dhidakaule, KGP-9
15	Ganga Prasad Shiwakoti		M	Dhidakaule, KGP-9
16	Dambar Pd. Shiwakoti		M	Dhidakaule, KGP-9
17	Shrijana Shiwakoti	Woman Headed	F	Dhidakaule, KGP-9
18	Krishna Pd. Shiwakoti		M	Dhidakaule, KGP-9
19	Tulasa Adhikari	Woman Headed	F	Marse, KGP-9
20	Ganesh Bdr. Shiwakoti		M	Marse, KGP-9
21	Buddhi Bahadur Shiwakoti		M	Marse, KGP-9
22	Siddi Prasad Shiwakoti		M	Marse, KGP-9
23	Sabitra Siwakoti	Woman Headed	F	Marse, KGP-9
24	Bishnu Prasad Siwakoti		M	Marse, KGP-9
25	Tulasi Prasad Siwakoti		M	Marse, KGP-9
26	Rup Narayan Siwakoti		M	Marse, KGP-9
27	Subash Siwakoti		M	Marse, KGP-9
28	Ramsaran Siwakoti		M	Marse, KGP-9
29	Ram Prasad Siwakoti		M	Marse, KGP-9
30	Indra Lal Siwakoti		M	Marse, KGP-9
31	Man Bahadur Sedhain		M	Marse, KGP-9
32	Dinanath Sedhain		M	Marse, KGP-9
33	Bal Krishna Sedhain		M	Marse, KGP-9
34	Bal Kumari Sedhain		M	Pokhari, KGP-9
35	Karnananda Sedhain		M	Pokhari, KGP-9

S.N.	Name list of beneficiary	Vulnerable HHs(Dalit, IPs and Women Headed HHs)	Sex	Former -Sundrawati-1
36	Manjari (maha laxmi)Sedhai	Woman Headed	F	Pokhari, KGP-9
37	Tek Raj Sedhain		M	Pokhari, KGP-9
38	Laxmi Prasad Sedhain		M	Pokhari, KGP-9
39	Ngmendra Prasad Sedhain		M	Pokhari tole, KGP-9
40	Tika Bhakta Sedhain		M	Pokhari, KGP-9
41	Tika Prasad Pakuwal		M	Dihi, KGP-9
42	Thir Bahadur Siwakoti		M	Khole, KGP-9
43	Naramaya Siwakoti	Woman Headed	F	Khole, KGP-9
44	Tanka Bahadur Siwakoti		M	Khole, KGP-9
45	Ganga Bahadur Siwakoti		M	Khole, KGP-9
46	Janak Raj Siwakoti		M	Khole, KGP-9
47	Bal Kumari Adhikari	Woman Headed	F	Khole, KGP-9
48	Gopal Prasad Adhikari		M	Khole, KGP-9
49	Balaram Adhikari		M	Khole, KGP-9
50	Dev Maya Adhikari	Woman Headed	F	Khole, KGP-9
51	Santa Kumar Dahal		M	Dihi, KGP-9
52	Ananta Raj Dahal		M	Dihi tole, KGP-9
53	Rishi Prasad Sedhain		M	Dihi, KGP-9
54	Shanta Prasad Sedhain		M	Dihi tole, KGP-9
55	Jagannath Sedhain		M	Dihi, KGP-9
56	Chandra Lal Sedhain		M	Dihi tole, KGP-9
57	Keshav Prasad Sedhain		M	Dihee tole, KGP-9
58	Ambika devi upreti		M	Pokhari, KGP-9
59	Punya prasad shiwakoti		M	Dhidhakaule, KGP-9
60	Surya Bahadur Thami	IP	M	Thadochaur, KGP-9
61	Lokendra Bdr. Thami	IP	M	Thadochaur, KGP-9
62	Manggali Thami	Woman Headed/IP	F	Thadochaur, KGP-9
63	Sukabir Thami	IP	M	Thadochour, KGP-9
64	Thulo Kanxa Thami	IP	M	Thadochaur, KGP-9

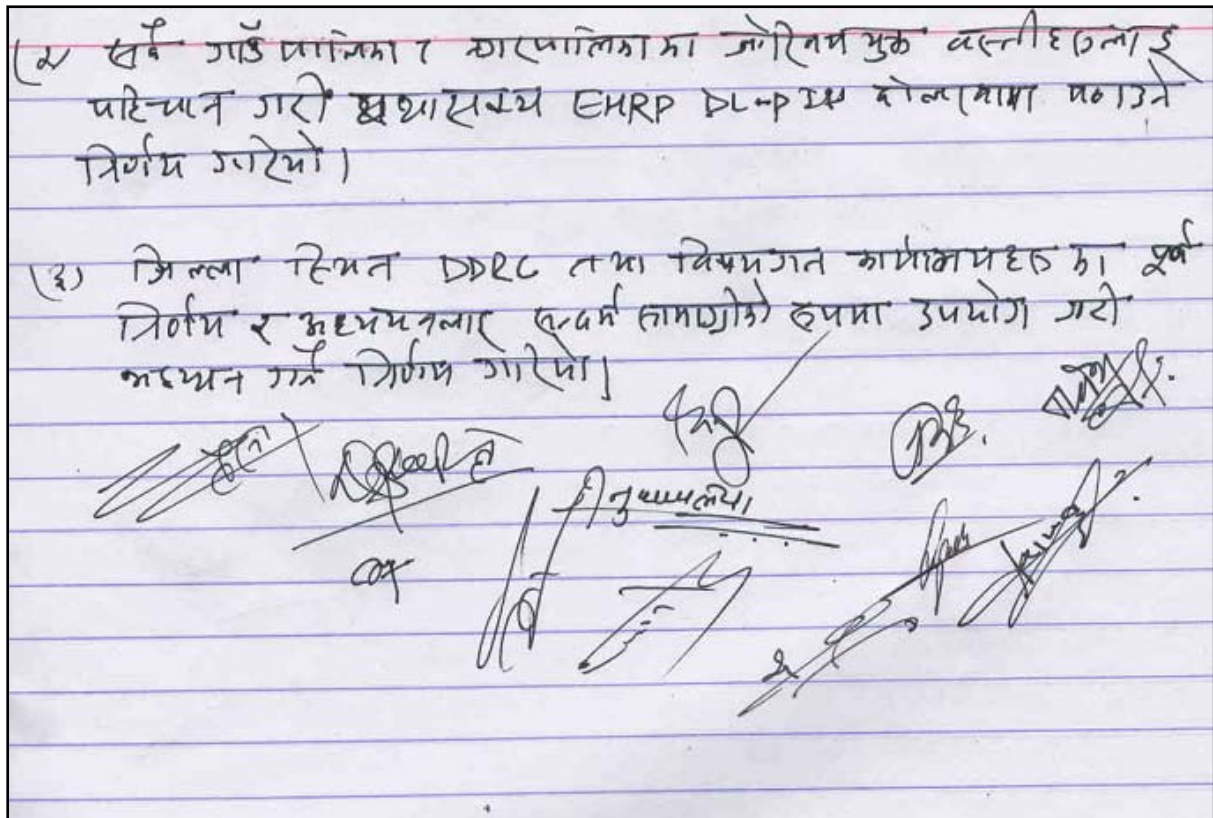
Annex-3: Minutes and Photograph of DDC-ENRC Consultation Meeting

मिति २०१८ वैशाख १५ गौरीगढा दिन शुक्रमिथि आवाय पुनर्निर्माण आयोजना जिल्ला आयोजना कार्यान्वयन डेडी केन्द्रका आ-गैजनामा वसिस्त्राको सामाजिक तथा वातावरणीय अध्ययन प्र-तिवेदनको प्रस्तुति र छलफल कार्यक्रममा उपस्थित सहभागिहरु बाट देहाय बमोजिमको सुझावहरु प्राप्त भयो।

उपस्थिति

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 लज्जा आचार्य, प्रमुख NRA केन्द्रका.
 गणेश तमाङ, कार्यालय आविद्वत, विगु गाउँपालिका
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 हरि थापलिया, कार्यालय अ. / ब्रह्मपुर गाउँपालिका
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 माधव प्र. सुवेदी, का.आविद्वत, जि.स.पा. देहाका
 बालु शौली, का.आविद्वत, कालिचन्द गाउँपालिका
 गणेश खेरी, प्रा.वि.आविद्वत, जि.स.स.
 कृष्ण व.श्रेष्ठ, DTL, EHRP/DLPEU, देहाका
 श्याम शिरोर मादन, DCC: DEELCS, २०१८-१९
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 प्रकाश शम्सेर, NRES,

निर्वाहकः -
 (ग) मस्ती स्तुठा (सामाजिक र वातावरणीय अध्ययन प्रतिवेदन) प्रस्तुतीमा सुझाव सुकान गरिने EHRP DL-PEU पत्रादेश निर्वाह गरिने।



Copy of Minute of ENRC meeting at DCC



Picture 1: ENRC, meeting at DCC hall

Annex 4: List of Consultation

S.N	Name	Tole	Contact No.
1	Purusottam Dahal	Marse Dhidakaule	9854045263
2	Tirtha Kumar Ghimire(Secretary)	Sunrdawati	9844045217
3	Tulasa Siwakoti	Marse Dhidakaule	
4	Bal Kumari Adhikari	Marse Dhidakaule	
5	Man Bahadur Sedain	Marse Dhidakaule	
6	Dev Maya Adhikari	Marse Dhidakaule	

Annex 5: Photographs



Picture 2: View of upper part of Marse settlement



Picture 3: View of Dhidakaule settlement

Annex 6: Sub project in Google Map

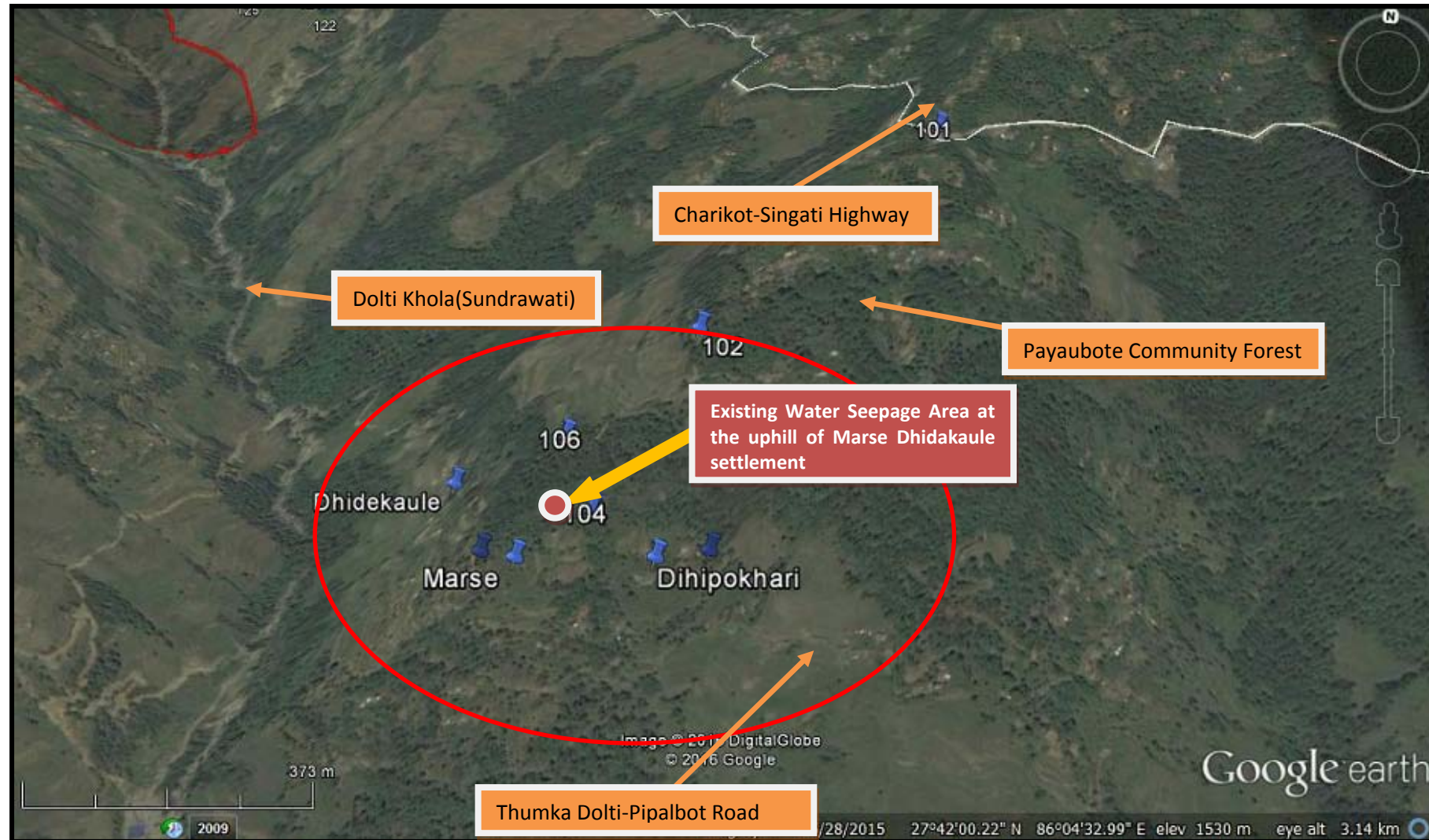


Figure 3: Marse Settlement in Google Map

Annex 7: Quantity Calculation Sheet**Type of house: Model no. Stone Masonry in Cement Mortar (SMC-2.1)**

S. No.	Structurewise	Materials				
		Stone (m ³)	Cement (Bags)	Sand (m ³)	Aggregate (m ³)	Timber (m ³)
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				0.59
	Additional Needed/House	20				1.39
	Additional Needed for 64 Houses	1280				88.70

Source: MoUD/DUDBC, GoN and Field Survey, 2017