

Government of Nepal

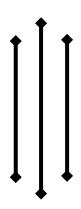
Ministry of Federal Affairs and Local Development

OFFICE OF THE DISTRICT COORDINATIONCOMMITTEE

Nuwakot

Earthquake Housing Reconstruction Project

(EHRP)



Environmental and Social Screening Report (ESSR)

Sub project Mahendra Ma. Vi./Settlement: 28-59-2-04: Thansing VDC, Nuwakot District

Date: 3August, 2017

Seal of Acceptance of Environment and Social Screening Report

Upendra Pyakurel

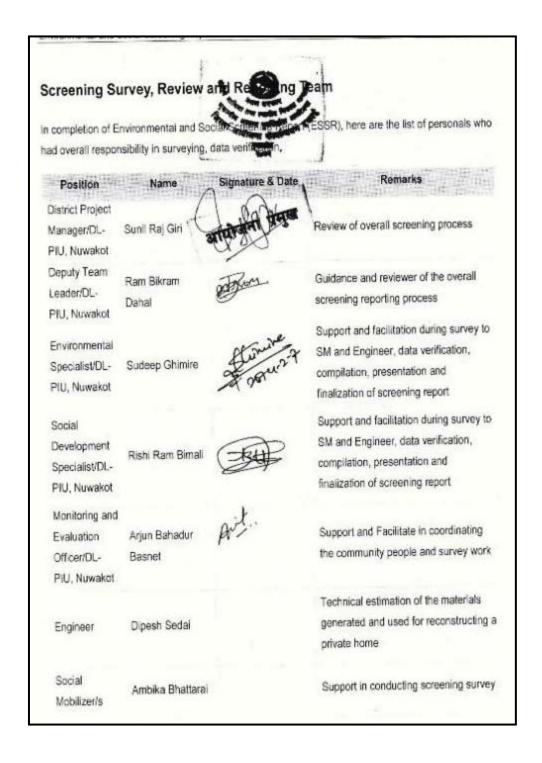
Energy and Environment Officer

Energy and Environment Section/Committee

District Coordination Committee

Bidur, Nuwakot





Acronyms and Abbreviation

CBS Central Bureau of Statistics

CL-PIU Central Level Project- Implementation Unit

DCC District Coordination Committee
DDC District Development Committee

DL-PIU District Level – Project Implementation Unit

DTO District Technical Office

EHRP Earthquake Housing Reconstruction Project
ENRC Environment and Natural Resource Committee
ESMF Environmental and Social Management Framework

ESMP Environmental and Social Management Plan ESSR Environment and Social Screening Report ESSS Environment and Social Screening Survey

HHs Households

ICS Improved Cooking Stove IP Indigenous People

LGCDP Local Governance and Community Development Programme

LPG Liquid Petroleum Gas

MoFSC Ministry of Forest and Soil Conservation

MoUD Ministry of Urban Development NRA National Reconstruction Authority NTFP Non Timber Forest Product

OP/BP Operational Policy/ Bank Policy
PIU Project Implementation Unit
POs Partner Organizations

PAR Project Implementation Plant

RAP Resettlement Action Plan TCN Timber Corporation of Nepal

VCDP Vulnerable Community Development Plan

VDC Village Development Committee

Units

Numbers/ Count

% Percent
cft Cubic Foot
cum/m³ Cubic Meter
km Kilometer

masl Meter Above Sea Level

Table of Contents

AC	CRONYMS AND ABBREVIATION	Ш
TA	BLE OF CONTENTS	IV
1.	BACKGROUND	1
2.	SCOPE OF EHRP	1
3.	SUB PROJECT	2
4.	SOCIAL AND ENVIRONMENTAL SCREENING AND ITS OBJECTIVES	3
5.	METHODOLOGY	3
6.	FINDINGS AND ISSUES	3
_	A. EARTHQUAKE DAMAGED HOUSES AND LOCAL CONSTRUCTION MATERIALS B. FOREST AND WILDLIFE	3
(C. DEBRIS/SOLID WASTE MANAGEMENT AND HAZARDOUS MATERIALS	4
_	D. SOCIO-ECONOMIC AND CULTURAL FEATURES	4
	E. WATER AND SANITATION	4
	F. BUILD BACK BETTER OPPORTUNITY G. ANY SENSITIVE SITE	5 5
•		3
7. RE	FEEDBACKOF ENVIRONMENT AND NATURAL RESOURCE COMMITTEE (ENRC) EVIEW MEETING	5
8.	ENVIRONMENTAL AND SOCIAL MITIGATION MEASURES ANDMONITORING	
AC	TIVITIES	5
9.	CONCLUSIONS AND RECOMMENDATION	10
I	Annexes	II
I	ANNEX I: ENVIRONMENTAL AND SOCIAL SAFEGUARD SCREENING CHECKLIST	П
I	Annex II: Beneficiaries of Mahendra Ma. Vi. Settlement	Х
I	ANNEX III: REVIEW MEETING MINUTES FOR APPROVAL OF SCREENING REPORT FOR THANSING VDC	XIV
I	ANNEX IV: LIST OF CONSULTATION	XVI
A	ANNEX V: ARIAL VIEW OF MAHENDRA MA. VI.SETTLEMENT IN GOOGLE MAP	XVII
I	ANNEX VI: QUANTITY CALCULATION SHEET	XVIII

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. Nuwakot is one the earthquake affected district. According to National Reconstruction Authority (NRA) source, the total number of houses damaged in Nuwakot district is 74533 of which 65759 are fully damaged and 8774 partially damaged.

Government of Nepal has selected Nuwakot 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 district) 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 laborers 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 September 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

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 Mahendra Ma. Vi. Settlement is located at Thansing VDC Ward no-2 and lies in southeastern part of distict headquarter, Bidur(Fig.1) and detailed settlement boundary is presented in Annex V. The settlement is accessible through Tokha-Chhahare Highwayof earthen type.



Fig. 1: Map ShowingMahendraMa.Vi. Settlement in the Thansing VDC

Physiographical condition of the sub project area is characterized by mountain, subtropical climate, surrounded by uphill area with no such happening of any natural disaster.

The total number of eligible HHs considered as beneficiaries identified from National Reconstruction Authority (NRA) for "Nepal Earthquake 2015" within this settlement within this is 142 HHs.

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 Development Committee (DDC) and VDCs 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 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 wasunder taken on 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 potential environmental and social issues and impacts identified by the Environment & Social screening of the affected settlement:

A. Earthquake Damaged Houses and Local Construction Materials

- With scattered distribution, a typical house before the earthquake comprised of 24'*32' plinth with five rooms in 2-3 stories made from timber, stone, clay, bamboo and corrugated Sheets. The proposed newly reconstruction houses will be made with stone and brick masonry using availability of local raw materials under government standard;
- The 142 beneficiaries HHs are rebuilding their houses in the same location following recommendation 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 VDCs;

- The beneficiaries are currently residing in temporary shelters within the settlement;
- About 40 percent of the houses will be built using stone and remaining sixty percent will use bricks for reconstructing their houses. Total additional demand of stone approximately 1,704 cum, bricks is 22,57,374 numbers and timber is 251.34cum besides sand, aggregate, cement, iron are also required for reconstruction (Annex VI);
- All required raw materials for building will be purchased from DCC (former DDC) approved quarry site nearby ward 2, 3 & 4 of former Thansing VDC. Most of the identified quarry sites are located nearby Likhu River and local markets are located at Dhikure, Battar, and Bidur;.
- With few exception most of the generated debris are already managed in-situ by the eligible HHs; and
- Stone and timber salvaged are being packed and stored properly and being used for reconstructions of houses.

B. Forest and Wildlife

Most of the sub project area lies within the agricultural land and has no forest area. Wild lives and NTFPs were not reported in the settlement area. Leaf and fruit of *Aap* (Mangiferaindica), *Amala* (Phyllanthusemblica), *Titaepati* (Artemisiaindica), *Ghodtapre* (Centellaasiatica), *Neem* (Azadirachtaindica, *Bojho* (Acoruscalamus), *Parijaat* (Nyctanthesarbortritis), *Sisnu* (Utricadioica), etc are medicinal plants found within the settlement.

C. Debris/Solid Waste Management and Hazardous Materials

• Debris from earthquake-damaged houses is managed at site by respective owner on their own. No hazardous waste has been reported or observed. Solid waste like empty cement bags, metal scarps generated during construction will have minimal impact.

D. Socio-economic and Cultural Features

- The project area is a heterogeneous community where indigenous households and other households live together in scattered distribution;
- Out of 142 HHs in the community, 40 HHs are Indigenous, 15 HHs are Dalit, and remaining 91 HHs are of Brahmin&Chhetri Community and among 142 HHs 28 HHs are wormen headed HHs. (Annex-,Eligible HHs);
- Agriculture and labor works are the major source of livelihood among beneficiaries;
- School and public health post is present at half an hour walking distance;
- The existing earthen rural road provides access to the market and approved quarry sites to collect construction materials; and
- All the eligible HHs gradually shifting the traditional firewood with Liquefied Petroleum Gas (LPG) as cooking fuel.

E. Water and Sanitation

The source of water for drinking facility is from SindhureKhola spring. Sanitation condition was also found satisfactory within the settlement even though some of the HHs are using temporary toilet which will be completed with the final installment grant money provided under government's overall approach to EHRP. Project activities and implementation is not likely to affect aquatic life of nearby Likhu river

F. Build Back Better Opportunity

- Improved water, sanitation and hygiene situation in the settlement by toilet construction using housing grant allocated for sanitation purpose and adoption and installation of alternative energy measures;
- As some of the individual residential houses in the settlement/ subproject area are still using firewood as the traditional cooking fuel, this project provides an opportunity to build Improved Cooking Stoves (ICS) or bio-gas etc; and
- These could be promoted through agencies including government and NGOs/ INGO which are already engaged in these sectors in the district. Such opportunity needs to be further explored and promoted as far as possible.

G. Any Sensitive Site

There is no known significant physical cultural site, and no protected site in the immediate surrounding of the subproject/ settlement. There is no known habitat for endangered, rare, protected or special species. There are no hazardous place or restricted place within the settlement.

7. Feedbackof Environment and Natural Resource Committee (ENRC) Review Meeting

Following are the major concern/recommendations from the DCC-ENRC meeting held on 25th April, 2017 (Annex III)

- It is likely that the most of the earthquake affected HH may choose to rebuild their houses in their own land that is being used for agriculture purpose (paddy fields along foot of the hills in the area).
- Local government is concerned that as a result of shifting and rebuilding process in the area, there could be loss of productive agricultural land which could potentially affect the local economy.
- Awareness activities in relation to the above mentioned issue should be carried out in projectMahendra Ma. Vi settlement land area

8. Environmental and Social Mitigation Measures and Monitoring Activities

The following are Environmental and Social issues and mitigation measures identified from screening report.

Table-1: Environmental and Social Issues, Impacts and Mitigation Measures.

SN	Environmental and	M.C. C. M.	M'4' - 4' - 1 M - may Cont	Responsibility		Remarks
SIN	Social Issues	Mitigation Measures	Mitigation Measure Cost	Implementation	Monitoring/Su pervision	
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 (Kukhure Chautara, Dhikure, Battar, and Bidur). Quarry operators supply the materials from approved quarry sites which are about 18 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, and from licensed local market. The timber Corporation of Nepal, a government entity, also supplies timber at subsidized rate through its depot for the earthquake affected district.	Contractor will be responsible to borne mitigation cost as a part of quarry site license approval clause.	Household/DL-	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.	The construction of small residential buildings will involve small scale civil works. Hence, there is health and safety risks of minor	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	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	DL-PIU	CL-PIU/NRA	

SN	Environmental and	Midication Magazine	Miliantian Maganus Cont	Responsi	ibility	Remarks
SIN	Social Issues	Mitigation Measures	Mitigation Measure Cost	Implementation	Monitoring/Su pervision	
	accidents and injuries.	made aware of the safety risks and management.	and social training, awareness and dissemination plan and cost/budget.			
3.	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	
4	Build Back Better Opp	portunity – Enhancement Measures				
4.1	Health and sanitation	In terms of prioritizing built back better opportunity need priority are:. 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) Renewable energy (including solar power, or bio-gas etc	Housing construction support of NRs 25,000	Beneficiary Household/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.
4.2	Indigenous Peoples and other vulnerable groups including marginalized, poor, woman headed households, disabled	Mitigation measures include: • Targeted communication and awareness to vulnerable group(e.g. organizing consultation in areas accessible for women and people	This will not require additional mitigation cost.	DL-PIU/Mobile team/ Partner organisations (The team will ensure that	Monitoring by CL-PIU/NRA	The Government/Project is drafting a guideline for Vulnerable Community Support Package equivalent to NRs

SN	Environmental and	Mitigation Measures	Mitigation Measure Cost	Responsibility		Remarks
BIN	Social Issues	Mingation Measures	Winigation Weasure Cost	Implementation	Monitoring/Su pervision	
	people	with disabilities.) on: Awareness on efficient usage of water and WASH Information about the project, grant, training opportunities Awareness campaign on indoor pollution and its health effects Awareness to avoid use of productive land in reconstruction. 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.gfacilitate opening bank account, paperwork for installments/tranche, etc.)		vulnerable groups are targeted and their participation in ensured through district project team mobilization)		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 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.
3	Loss of productive agricultural land in	Organize awareness program and distribute awareness materials in	The cost of awareness activities is internalized within the overall	DL-PIU	CL-PIU/NRA	CL-PIU to submit copy of awareness event to

	Environmental and			Responsibility		Remarks
SN	Social Issues	Mitigation Measures	Mitigation Measure Cost	Implementation	Monitoring/Su pervision	
	the settlement area	relation to prevention of loss of productive agricultural land in and around the settlement area	cost of training and awareness.			Bank. Ongoing activities as a part of settlement level safeguard awareness activities.
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.	Besides cost incurred for nominal co-ordination, this will not require additional mitigation cost.	DL-PIU	CL-PIU/NRA	Agencies working in different sections will be identified and added later on in the Annex

9. Conclusions and Recommendation

The major 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 and other construction materials will be purchased from nearby local markets such as Dhikure, Battar, and Bidur. Besides, use of timber from own farmland, and purchase from Timber Corporation of Nepal (TCN) will fulfill the additional demand of additional 251.34cum:
- The demand of 1,704 cum stone will be fulfilled from nearby DDC approved quarry sites within the settlement of Thansing VDC wards 2, 3 & 4.
- Therefore, impact on forest and quarry sites will be low or unlikely.
- Occurrence of natural hazards/disaster inMahendra Ma. Vi. settlement is low or unlikely and is insignificant concern;
- Land acquisition and involuntary resettlement is not required; and
- There will be no adverse impacts on marginalized and disadvantaged group communities including indigenous peoples groups as they are living in heterogeneous distribution

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.

DL-PIU/ESpecialist Name: Sudeep Ghimire Designation: Environmental Specialist DL-PIU/ SDS Specialist Name:Rishi Ram Bimali Designation:Social Development Specialist

Annexes

Annex I: Environmental and Social Safeguard Screening Checklist

1.	Project Title	Earthquake Housing and Reconstruction Project (EHRP)
2.	Project District	Nuwakot
3.	Name of the VDC/Municipality	Thansing VDC
4	Name of the Settlement, Ward No.	Mahendra Ma.Vi2
5	Number of eligible households:	142 HHs
6	Altitude of the Settlement (in meters)	911 masl
7	Nearest road head/highway/headquarter	Tokha-Chhahare Highway
8	Settlement ID/no	28-59-2-04
9	Proposed Date of Commencement of Work:	December 30, 2016
	Number of houses damaged	142 HHs
	Number of houses to be reconstructed	142 HHs
	Quantity of debris generated (by type)	Stone, bonding soil, wood, rags,
	Quantity of reusable materials (by type)	Stone Timber
	Quantity of debris that needs to be disposed	NA, with very few exception most of the generated debris are already managed in-situ by the beneficiaries household, Stone and timber salvaged are being packed properly and being used wisely
	Quantity of construction materials needed (Timber, sand, gravel, stone, etc)	Additional about 251.34 cum Timer and about 1,704 cum stone is needed and brick of 22,57,374 numbers
	Any hazardous materials mixed with debris (e.g. from damaged health-posts, medicines, from agrovet shops/ service etc)	None:, soil as binding materials are properly disposed and leveled in the adjoining cultivated land

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).	Not applicable
House/ shelter should not be located in protected area, and forest.	Not applicable
Any activity, including material quarrying, resulting significant conversation or degradation of critical natural habitat is not permitted	Not applicable
Use of any public PCR in private home reconstruction is not permitted.	Not applicable

S.No	ISSUES	YES	NO	DO NOT KNOW/remar ks
1	Is the proposed sub-project likely to have minimal or no adverse environmental impacts?	1		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?		V	OP 4.01
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?		V	OP 4.36
	Is the proposed subproject likely to bring about changes in the management, protection or utilization of natural forests or plantations?		√	
4	Will the sub-project be supporting reconstruction, management, or preservation of physical cultural resources?		1	OP 4.11
	Is the subproject located in, or in the vicinity of, cultural sites?		$\sqrt{}$	
	Will the sub-project likely adversely impact physical cultural resources?		√	
5.	Will the sub-project involve significant conversion or degradation of critical or non-critical natural habitats?		1	OP 4.04
6	Does the sub-project involve involuntary land acquisition or prior acquisition of land or demolition of existing structures?		V	OP 4.12

7	Are there any ethnic minority communities present in the project area?	√	1	OP 4.10
	Are they adversely impacted by the proposed sub-project?		\	
Physic	cal 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?		V	
2	Is the settlement located close to groundwater sources, springs, surface water bodies, riverbank, and watercourses?	V		Perennial Likhu River at about 1 Km from the settlement
3	How is the terrain? –flat, ridge, undulating, terraced, valley, tar etc.		V	Hill with mostly terraced farming land
4	Any history of erosion, flashflood, landslides, earthquake in the area/ vicinity?		1	
5	Current land use practice (agriculture, grazing, barren, forest, shrubs)		V	Mostly agricultural land
6	Is the subproject located on prime agricultural land?		1	As most of the reconstruction work is in-situ
7	Does the sub project involve significant extraction, diversion or containment of surface or ground water for the local people or agriculture?		V	
8	Any existing/approved/ potential quarry sites (sand, aggregate, stone, slates, boulders) in the vicinity of the sub-project?	٧		Likhu River bank at the side of Thansing VDC ward no. 2, 3 & 4 had obtained approval from DDC, Nuwakot
9	Are there any potential sites/land for debris management/solid waste management/reclamation for future use?		V	Not applicable since people on their own have manage their waste at HHs level
10	Are there any areas or features of high landscape or scenic value on or spots with unique feature in and		V	

	around the location which could be affected by project? (examples, viewing point/ ridge/ peak, fall, cave, cliff etc)				
11	Any risks (health and safety, location- cliff, ridg associated with the setting of the sub-project who be taken care?			V	
	Biological features				
1	Any critical habitat or ecosystem of importance	?			
	Is the subproject located in or adjacent to a prot areas/ national forests, wilderness areas, wetland (Ramsar), biodiversity, critical habitats?				
2	If the subproject is located near the forest, what category of the forest- national, community, lea religious etc.?			V	
3	Any area/ spot in and around the subproject/ set that is known as/for wildlife/ bird habitat (exam bear, langur monkey, red panda, deer, trees whe or bats nests, cliff where wild beehives, etc)	ples –		√	
	Is the settlement/ subproject area a known wildle movement/ migration route or bird migration route.			V	
	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?	the loc fish do • The su have a River,	cality and not occupy advisors and its means are significant.	nd impocur in the cour in the court in the c	portant river of ortant species of the river; ities will not pacts on Likhu hed; and e vicinity of the
4	Would the sub-project potentially cause adverse	impacts		√	
•	to habitats (e.g. modified, natural, and critical h and/or ecosystems and ecosystem services?	-		,	
5	Does the Project involve changes to the use of l resources that may have adverse impacts on hab ecosystems, and/or livelihoods?			1	
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 endangere or their habitat?	ed species		V	

8	Does the sub-project implementation leads to harvesting of natural forests, timber, plantation development, or deforestation?		V		
9	Any NTFP or medicinal plants in and around the subproject?	1		Mangiferaindic a(leaf and fruit), Phyllanthusemb lica, Artemisia indica, Centellaasiatic a, Azadirachtaindi ca, Acoruscalamus, Nyctanthes arbor-tritis, Utricadioica, etc within the settlement	
	Socio-economic and Cultural Features			•	
1	Is the subproject located in a densely populated area?		V	142 HHs at settlement are scatteredly distributed	
2	How many people comprise a typical household?	1		Average HHs size is 4	
3	How many households are without any land/shelter, any squatters?		1	Every HHs have their own private land	
4	Is the subproject located near to the sites of archaeological/historical or cultural importance?		V		
5	Presence of minority/vulnerable/indigenous population in the area?	V		40 HHs are Indigenous with 2 Minority HHs, 15 HHs are Dalit, and 28 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?		V		
7	What household and livelihood support activities typically take place within the affected community?	Agrio	Agriculture and few service		
8	What are the typical building practices of the affected	Sizes	Sizes vary each cases with		

	people and what are the different materials have they used in the past?		most 24'*32' plinth with rooms in 2-3 story, Timb Stone, Clay, Bamboo and Corrugated Sheets		
9	Will the project require displacement or relocation of persons in the affected area?		1		
10	Who are the vulnerable people in the population, also considering those affected by HIV/AIDS etc.?		1	IPs, Women Headed HHs and Dalit are different Vulnerable People	
11	What is the current availability of water for drinking and personal hygiene,	1		Adequate Supply from SindureKhola and sanitation condition is satisfactory	
12	What is the current provision of social/infrastructure facilities (health posts, sub-health posts, schools, communications, road etc?)	V		Access of medical and school	
13	Are there any roads on around the location which causes congestion, environmental problems during project implementation?		1		
14	Are there any open space, industries, recreation areas which could be affected by the project?		V		
15	Are there any women headed HH (No. of HHs to be identified) in the settlement.	√		28 HHs are women headed HHs	
16	Are there any conflicts about the use of local resources		1		
	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?)	√ 		Agencies working in different sections will be added later on in the 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.		V		

DL-PIU, Nuwakot VII

Customized minimum requirements for the subproject/ settlements	 Discourage use of agricultural land for housing; During reconstruction; encourage re-use of available resource, properly manage waste generated, follow proper safety measure, due priority to vulnerable HHs; and Properly manage remaining demolition waste/debris during housing reconstruction
Identify programs/ activities for coordination and linking for 'building better' and / or synergy.	 Need for co-ordination with district level line agency; Housing construction support of NRs. 25,000 needs to be used as an opportunity to further promote sanitations, ICS etc; The available NTFPs/Medicinal plants to be utilized at maximum through income generating activities; 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 Coorporation of Nepal.
- (ii) **Permits/ clearance needed are:** T
- Ensure that sand, gravel & stone are sourced from approved quarry sites.
- (iii) Main social issues:
- 40 HHs are indigenous HHs, 15 HHs are from Dalits, and among 142 HHs,28 HHs are women headed
- 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 resettlementis not needed
- (v) Further assessment/investigation needed and next step.
- (vi) Need for any special study: Not applicable
- (vii) Preparation ESMP (main issue to be addressed by the ESMP):
- Due to the project implementation, environmental and social impacts are nominal or no adverse impacts. Therefore no need of ESMP

(viii) Need for IPDP/VCDP:

• The Project area is a mixed community where IPs households and other households live together. Other vulnerable groups (Dalits and female headed HHs) are also present in the area. 40 HHs out of 142 HHs in the community are indigenous HHs who are scattered within the settlement and do not have collective attachment to the area. They have same socio-economic and educational status with other caste groups. The vulnerable households

DL-PIU, Nuwakot VIII

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.

- (ix) Need for IEE or EIA: Not applicable
- (x) Any other requirements/ need/ issue etc: Not applicable

Screening Tool Completed and Reviewed by:

Environmental	Social Specialist in	Project Manager in	Presentation/
Specialist in the	District Level -PIU:	District Level - PIU:	Briefing to DCC -
District Level -PIU: Title and Date: Sudeep Ghimire/20 th April, 2017	Title and Date: Rishi Ram Bimali/20 th April, 2017	Title and Date: Sunil Raj Giri/DTO Chief/Project Manager	ENRC done on: 25 th April, 2017 Advice, comments, and suggestions from the DCC-ENRC are attached in Annex 3 Screening cleared by DCC – ENRC on: 22 nd May, 2017

Annex II: Beneficiaries of Mahendra Ma. Vi. Settlement

		Vulnerable HHs(Dalit/IPs/Women			
S.N.	Beneficiary	HHs)	Gender	Ward	Village/Tole
1	Suresh Maharjan	Ips	M	2	Bit Labh
2	PasuramKhatiwada		M	2	Bit Labh
3	Arjun Prasad Khatiwada		M	2	Bit Labh
4	BhimsenGubhaju	Ips	M	2	Bit Labh
5	Gyanendra Man Bajrachary	Ips	M	2	Bit Labh
6	Ram Maya Nepali	D/Women HH	F	2	Bit Labh
7	JeetBahadurLamsal		M	2	Bit Labh
8	Jungi Ram Lamsal		M	2	Bit Labh
9	Kumar Gc	Ips	M	2	Bit Labh
10	Ram BahadurShakya	Ips	M	2	Bit Labh
11	Ram Saran Nepali	D	M	2	Bit Labh
12	AshaKajiGubhaju	Ips	M	2	Bit Labh
13	Bodh NathLamichhane		M	2	Bit Labh
14	Badri Prasad Pathak		M	2	Bit Labh
15	Bharat Bhandari		M	2	Bit Labh
16	SankhareDamai	D	M	2	Bit Labh
17	Podini Nepali	D/Women HH	F	2	Bit Labh
18	Santa Bahadur Nepali	D	M	2	Bit Labh
19	Ram Saran Mizar	D	M	2	Bit Labh
20	MakuriMizar	D/Women HH	F	2	Bit Labh
21	Krishna DuttaBhandari		M	2	Bit Labh
22	Rita Bhandari	Women HH	F	2	Bit Labh
23	SubhadraRawal	Women HH	F	2	Bit Labh
24	Bharat Prasad Lamichhane		M	2	Bit Labh
25	Tara Prasad Timilsina		M	2	Bit Labh
26	GobardhanTimilsina		M	2	Bit Labh
27	GomaTimilsina	Women HH	F	2	Bit Labh
28	Bhairav Raj Bhetuwal		M	2	Bit Labh
29	Ram BahadurPanta		M	2	Bit Labh
30	Krishna Raj Bhetuwal		M	2	Bit Labh
31	ShyamBahadurPathak		M	2	Bit Labh
32	Sankar Prasad Pathak		M	2	Bit Labh
33	RajuThapaliya		M	2	Bit Labh
34	Kamala Khawash	Ips/ Women HH	F	2	Bit Labh
35	GopalShrestha	Ips	M	2	Bit Labh
36	SitaShrestha	Ips/ Women HH	F	2	Bit Labh
37	Ravi Nepali	D	M	2	Bit Labh
38	Ram BhaktaSunar	D	M	2	Bit Labh
39	HariSharanShrestha	Ips	M	2	Bit Labh
40	Chandra KumariShrestha	Ips/ Women HH	F	2	Bit Labh
41	Ram Krishna Shrestha	Ips	M	2	Bit Labh
42	LalBahadurShrestha	Ips	M	2	Bit Labh

		Vulnerable			
S.N.	Beneficiary	HHs(Dalit/IPs/Women HHs)	Gender	Ward	Village/Tole
43	AshalalShrestha	Ips	M	2	Bit Labh
44	Maya Maharjan	Ips/ Women HH	F	2	Bit Labh
45	Prem Prasad Pathak	ips/ women iii	M	2	Bit Labh
46	Indra Raj Pathak		M	2	Bit Labh
47	Tara Prasad Pathak		M	2	Bit Labh
48	Narayan Prasad Pandey		M	2	Bit Labh
49	SomKumariGhartiChe	Ips/ Women HH	F	2	Bit Labh
50	BaikunthaGc	Ips	M	2	Bit Labh
51	LokBahadurSarki	D	M	2	Bit Labh
52	Tok Lama	Ips	M	2	Bit Labh
53	SumanPathak	Tpo	M	2	Bit Labh
54	Kumar Sunar	D	M	2	Bit Labh
55	Ram Prasad Pathak		M	2	Bit Labh
56	Mina Devi Neupane	Women HH	F	2	Bit Labh
57	Arjun Prasad Pathak	,, omen m	M	2	Bit Labh
58	JhankaNathPathak		M	2	Bit Labh
59	RabindraPathak		M	2	Bit Labh
60	Mukunda Raj Pathak		M	2	Bit Labh
61	Bishnu Prasad Pathak		M	2	Bit Labh
62	RudraLalThapaliya		M	2	Bit Labh
63	Tej Prasad Pathak		M	2	Bit Labh
64	BalKumariPathak		M	2	Bit Labh
65	Achyut Prasad Pathak		M	2	Bit Labh
66	Keshav Prasad Pathak		M	2	Bit Labh
67	Ram KumariPathak	Women HH	F	2	Bit Labh
68	Nutun Raj Panta		M	2	Bit Labh
69	Madhu Prasad Dixit		M	2	Bit Labh
70	Satya Narayan Dixit		M	2	Bit Labh
71	Jit Narayan Shrestha	Ips	M	2	Bit Labh
72	KedarShrestha	Ips	M	2	Bit Labh
73	PawanShrestha	Ips	M	2	Bit Labh
74	Sarad Kumar Shrestha	Ips	M	2	Bit Labh
75	MitheyShrestha	Ips/ Women HH	F	2	Bit Labh
76	SabitriPathak	Women HH	F	2	Bit Labh
77	Ravi BahadurPathak		M	2	Bit Labh
78	MahendraPathak		M	2	Bit Labh
79	Ram Kumar Pathak		M	2	Bit Labh
80	BijayaMaharjan	Ips	M	2	Bit Labh
81	KabitaMizar	D/ Women HH	F	2	Bit Labh
82	Krishna BahadurMijar	D	M	2	Bit Labh
83	Saran BahadurMijar	D	M	2	Bit Labh
84	BasudevGc	Ips	M	2	Bit Labh
85	Chandra BahadurGhartiCh	Ips	M	2	Bit Labh
86	MukundaGc	Ips	M	2	Bit Labh

		Vulnerable			
S.N.	Beneficiary	HHs(Dalit/IPs/Women HHs)	Gender	Ward	Village/Tole
87	DaxyaDev Dixit	nns)	M	2	Bit Labh
88	Dinesh Maharjan	Ips	M	2	Bit Labh
89	Rama Pathak	Women HH	F	2	Bit Labh
90	DutKumariBhujel	Ips/ Women HH	F	2	Bit Labh
91	Sita Devi Pathak	Woman HH	F	2	Bit Labh
92	FattaBahadurBhujel	Ips	M	2	Bit Labh
93	MadanShrestha	Ips	M	2	Bit Labh
94	Ram Kumar Shrestha	Ips	M	2	Bit Labh
95	Krishna BahadurGhartiCh	Ips	M	2	Bit Labh
96	SaraswotiPathak	Women HH	F	2	Bit Labh
97	Hari Prasad Pathak		M	2	Bit Labh
98	Gobinda Prasad Bhetuwal		M	2	Bit Labh
99	GhanshyamPandey		M	2	Bit Labh
100	Samba DevPandey		M	2	Bit Labh
101	Kamali Nepali	D/ Women HH	F	2	Bit Labh
102	GobindaPandey		M	2	Bit Labh
103	BasudevPandey		M	2	Bit Labh
104	KedarPandey		M	2	Bit Labh
105	Janak Prasad Pandey		M	2	Bit Labh
106	Dipak Raj Pathak		M	2	Bit Labh
107	Bishnu Prasad Pathak		M	2	Bit Labh
108	DipakPathak		M	2	Bit Labh
109	IndraBahadurPathak		M	2	Bit Labh
110	TulsiNathLamichhane		M	2	Bit Labh
111	Sabarna Prasad Lamichhane		M	2	Bit Labh
112	PitambarLamichhane		M	2	Bit Labh
113	Ishwori Prasad Lamichhane		M	2	Bit Labh
114	Min Kumar Dhamala		M	2	Bit Labh
115	Macchindra Prasad Lamichh		M	2	Bit Labh
116	KeshavNathLamichhane		M	2	Bit Labh
117	Kamala Lamichhane	Women HH	F	2	Bit Labh
118	BishnuLamichhane	Brahmin/Chhetri	M	2	Bit Labh
119	BhawanathNeupane	Brahmin/Chhetri	M	2	Bit Labh
120	ParbatiNeupane	Women HH	F	2	Bit Labh
121	Krishna Prasad Neupane	Brahmin/Chhetri	M	2	Bit Labh
122	SitaBhattarai	Women HH	F	2	Bit Labh
123	Neem Prasad Neupane	Brahmin/Chhetri	M	2	Bit Labh
124	Bala Ram Pathak	Brahmin/Chhetri	M	2	Bit Labh
125	MotilalShrestha	Ips	M	2	Bit Labh
126	Sudan Pathak	Brahmin/Chhetri	M	2	Bit Labh
127	DilBahadurNeupane	Brahmin/Chhetri	M	2	Bit Labh
128	KedarNathGhimire	Brahmin/Chhetri	M	2	Bit Labh
129	DamberBahadurKhadka	Brahmin/Chhetri	M	2	Bit Labh
130	BindaPathak	Women HH	F	2	Bit Labh

DL-PIU, Nuwakot XII

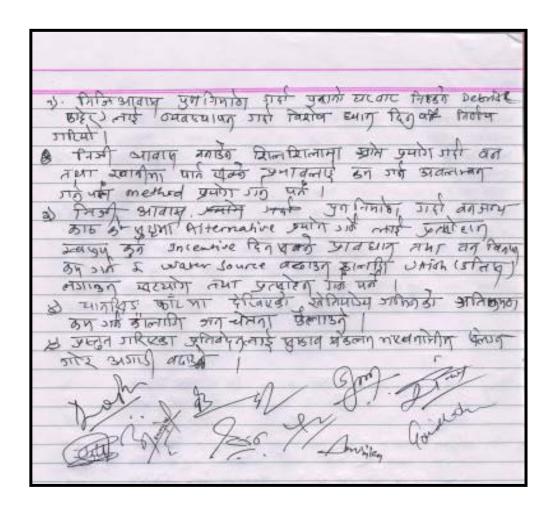
		Vulnerable HHs(Dalit/IPs/Women			
S.N.	Beneficiary	HHs)	Gender	Ward	Village/Tole
131	SabitriPathak	Women HH	F	2	Bit Labh
132	Rajkumar Lama	Ips	M	2	Bit Labh
133	Krishna Bahadur Lama	Ips	M	2	Bit Labh
134	DhanaKumari Lama	Ips/ Women HH	F	2	Bit Labh
135	GopalAdhikari	Brahmin/Chhetri	M	2	Bit Labh
136	Shanti Shrestha	Ips/ Women HH	F	2	Bit Labh
137	SeteyShrestha	Ips	M	2	Bit Labh
138	Krishna BahadurShrestha	Ips	M	2	Bit Labh
139	Babu Krishna Pathak		M	2	Bit Labh
140	DipakPathak		M	2	Bit Labh
141	GopinathLamichhane		M	2	Bit Labh
142	Rabindra Prasad Lamichhan		M	2	Bit Labh

DL-PIU, Nuwakot XIII

Annex III: Review Meeting Minutes for Approval of Screening Report for Thansing VDC

आज मिती 2068/1918 जाने यद नुवाडोट जिल्ला किल्ला स्मान्वप
न्यितिहो हलामा स्थानम् विडाप् अधिडारो अने डेस् वराष्ट्र परित
ज्यू डें अध्यक्षतामा भूडिमिय आवाद पूर्न निर्माश आयोजना अल्पाम
बित स्त्यमा अदिन बातावरशीय तथा खानांबित हर्नाट तथा व्यव-
स्थापन प्राप्तना । प्रमिवद्देन उपर हत्नफल गरि राप मुकाव पेरा गर्न
पते अपरात केपाल खरडाए अक्पीम आवाप पुत्रिमांका औषांकेता जिल्ला
ऑपरिता डामेल्यम ३३५ (DL-PLU) ल तमा पार्डी खावाड विद्र-ए
हेडरेकि मिल्तु बाताबरिक्य तथा स्वानामित इनाम त्यान र व्यवस्थान
प्रमिनदेन खार्थी ज्वामिन थानिषड्, जा विष्क हान त्रियु ६,५ इडमि-र
का वर् वरा विस्त हर्डा बातावर्शिय तथा खानानित हर्नाट अतिवेदन
उपर इत्मडल गरि मिलानुषाको राम प्रावरपु अवान गरिमी।
30/Eurl &
व. डिशर् न पछित. स्था- वि.अ, रुकार्शर दिले
2. केशा जाते पनी या कि लाग कि कि कि के प्रमान कि
2. वेट प्रकार और (NEA) जुनाकोर कर
4 500 de gen 19. 4. 3. 4. 48002 Gode
र अभिवता भारती साप किए मा पा किए का मा) कर्जा Andika
6. 2151 ac165 xester, 30, 12. 41-510 6/0
L. Grand grand - ES CLPEU EMRE SHOW
T. ETENTE - ES CLPEU EMPL
S43 BIEN OFTSIS - SDS. CLPIUEHRP CT.
19. Zitrey AMIN - DI-PIU, NUWARD. So-
9x 2181 AGARA CIEIR DUSTU Number &
The A TA
96 राहिता क्रांशकारी - 270 हैं।
ay Stelly ain form SDS DLPIU/EHRP STE
98. STEV FORT ES, DEPOVIENCE
१० उपेट । पानारेल उजा का का निर्मा के निर्मा के निर्माण
१६ अन्दर प्रभाती, जि. मूं. हे. हा. प्रमुप्त रिकेट
थयाति व होरि प्रमाद गुरामार्ड अल प्रतान प्रदेश कावसमाया हिस्सिन हो
20. \$101 IT - 172 - 15

DL-PIU, Nuwakot XIV



Annex IV: List of Consultation

Name of VDC:Thansing,2

Name of Settlement:MahendraMa.Vi

S.N	Name of Participants	Tole
1	RajendraLamichhane	Bitalab
2	Jagi Ram Lamasal	Bitalab
3	Bimala Nepali	Bitalab
4	DipakShrestha	Bitalab
5	IndraBahadurPathak	Bitalab
6	Ram Kumar Mijar	Bitalab
7	KiranMijar	Bitalab
8	SabitriPathak	Bitalab
9	Radika Su28-ar	Bitalab
10	DilimanMijar	Bitalab
11	HarisharanNeupane	Bitalab
12	GobindaPandey	Bitalab
13	MadavBhandari	Bitalab
14	DipakShrestha	Bitalab
15	DhurbaBahadur Nepali	Bitalab
16	ArjunKhatiwada	Bitalab
17	AashakajiGuvaju	Bitalab
18	Mohan Bahadur G.C	Bitalab
19	Mukunda Prasad Pathak	Bitalab
20	GobardanTimilsena	Bitalab

DL-PIU, Nuwakot XVI

Annex V: Arial View of Mahendra Ma. Vi.Settlement in Google Map



Annex VI: Quantity Calculation Sheet

Type of house: Model no. Stone Masonry in Cement Motar (SMC-2.1) and Stone Masonry in Cement Motar (BMC-2.1)						Total HHs: 142		
			Materials					
S.		2			Sand	2	Timber	
No.	Structure Wise	Stone (m ³)	Brick (#)	Cement (Bags)	(m^3)	Aggregate (m ³)	(m^3)	
	Upto D.P.C.							
1	level	19.00	5,000.00	82.50	12.00	7.00		
2	Super structure	31.00	21,495.00	138.00	18.00	7.00	2.29	
3	Roof						1.48	
To	otal (Per HHs)	50.00	26,495.00	220.50	30.00	14.00	3.77	
Reuse	from demolished							
house		20.00					2.00	
Total Reusable Materials		2,840.00					284.00	
Additional Needed/House		30.00					1.77	
Estimated Total Quantity		4,260.00	3,762,290.00	31,311.00	4,260.00	1,988.00	251.34	
Additi	ional Needed for							
	HHs Based upon							
Brick	Stone> (60:40)%	1,704.00	2,257,374.00	31,311.00	4,260.00	1,988.00	251.34	

Reference: MoUD/DUDBC

Note: *: - 1 $m^3 = 35.28$ cft

<u>Note:</u> Project has been providing training to local masons and carpenters on EQ resilient house construction. Each owner will build their own house using locally available skilled and unskilled human resource. Project will not hire contractor for constructing houses. Hence, three will be no influx of labour and no need for labour camp.

^{**: -} Ratio of ongoing construction of houses for bricks and stone (60:40)