



Government of Nepal

Ministry of Federal Affairs and Local Development

OFFICE OF THE DISTRICT COORDINATION COMMITTEE

Nuwakot

Earthquake Housing Reconstruction Project

(EHRP)



Environmental and Social Screening Report (ESSR)

Sub project Sheradil/Settlement: 28-59-4-10: Thansing VDC, Nuwakot District

Date: 3 August 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








Official Stamp

Environmental and Social Screening Report

Thansing VDC

Screening Survey, Review and Reporting Team

In completion of Environmental and Social Screening Report (ESSR), here are the list of personals who had overall responsibility in surveying, data verification,

Position	Name	Signature & Date	Remarks
District Project Manager/DL-PIU, Nuwakot	Sunil Raj Giri		Review of overall screening process
Deputy Team Leader/DL-PIU, Nuwakot	Ram Bikram Dahal		Guidance and reviewer of the overall screening reporting process
Environmental Specialist/DL-PIU, Nuwakot	Sudeep Ghimire		Support and facilitation during survey to SM and Engineer, data verification, compilation, presentation and finalization of screening report
Social Development Specialist/DL-PIU, Nuwakot	Rishi Ram Bimali		Support and facilitation during survey to SM and Engineer, data verification, compilation, presentation and finalization of screening report
Monitoring and Evaluation Officer/DL-PIU, Nuwakot	Arjun Bahadur Basnet		Support and Facilitate in coordinating the community people and survey work
Engineer	Dipesh Sedai		Technical estimation of the materials generated and used for reconstructing a private home
Social Mobilizer/s	Ambika Bhattarai		Support in conducting screening survey

DL-PIU, Nuwakot

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

OP/BP	Operational Policy/ Bank Policy
PIU	Project Implementation Unit
POs	Partner Organizations
RAP	Resettlement Action Plan
RM	Rural Municipality
TCN	Timber Corporation of Nepal
VCDP	Vulnerable Community Development Plan
VDC	Village Development Committee

Units

#	Numbers/ Count
%	Percentage
cft	Cubic Foot
cum/m ³	Cubic Meter
Km	Kilometer
masl	Meter Above Sea Level

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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. Nuwakot is one the earthquake-affected district. According to National Reconstruction Authority (NRA) source, the total number of houses damaged in Nuwakot district is 74,533 of which 65,759 are fully damaged and 8,774 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:

- Beneficiary households will build their houses 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 organizations¹. 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 Sheradil settlement is located at Likhu Rural Municipality(Former Thansing VDC Ward no.-4) and it lies in southeastern part of district headquarter, Bidur (Fig. 1) and detailed settlement level boundary is presented in Annex V. The settlement is accessible through *Tokha- Chhahare Feeder Road* of earthen type.

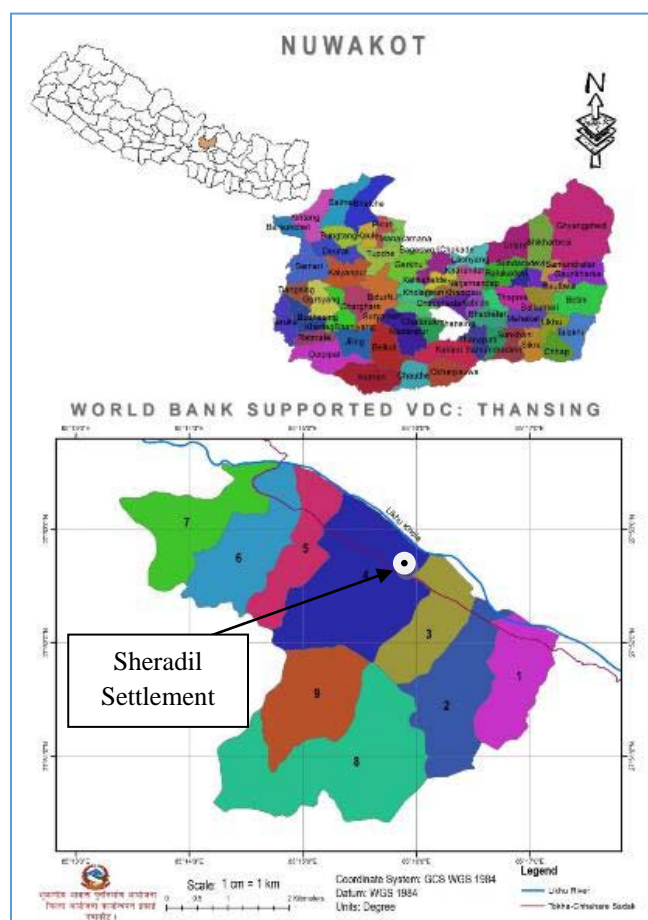


Fig.1: Map Showing Sheradil Settlement in the Thansing VDC

¹ Sector Plans and Financial Projection, May 2016, NRA.

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 is 25 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 was undertaken 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 Environmental and Social screening study of the affected settlement:

A. Earthquake Damaged Houses and Local Construction Materials

- The settlement is sparsely distributed where 25HHs are identified as beneficiaries HHs; the beneficiaries HHs are currently residing in temporary shelters within the settlement.
- With scattered distribution, a typical house comprises of 24'*32' plinth with four rooms in two stories made from Timber, Stone, Clay, Bamboo and Corrugated Sheets. Before the earthquake, most of the houses were made with stone/brick with mud bonded and few with cement. The proposed newly reconstruction houses will be made with stone and brick masonry using availability of local raw materials under government standard.
- The 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;
- 10 numbers beneficiaries has chosen to construct house with model Stone Masonry in Cement Mortar (SMC) and remaining 15 houses will be constructed following model Brick Masonry with Cement Mortar (BMC). Approximately. 300 cum of stone is required for constructing model SMC house and 3,97,425 numbers of bricks are required for constructing model BMC houses. Sand, aggregate, timber, cement, iron are other construction materials required for both of those models (refer details in Annex VI). All required raw materials for building will be purchased from DDC approved quarry site nearby other ward 3 & 4 of Thansing VDC and local market. Most of the identified quarry sites are located nearby Likhu River and local markets are located at Dhikure, Battar, and Bidur.
- The existing road provides access to the market and approved quarry sites to collect construction materials; 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 the Sheradil Community Forest is located nearby by the settlement. The total additional demand of timber for the settlement is about 44.25 cum after reusing 50 cum from salvage timber. Potential impact on community forest is not envisaged as this quantity is being managed through timber salvaged from demolished houses and purchasing from nearby cluster market at Dhikure, Battar and Bidur.
- Asparagus spp. is among the Non-Timber Forest Product (NTFP) found within the settlement.
- Project activities and implementation is not likely to affect aquatic life of nearby Likhu river;
- Rare occurrence of Langur & Wild Boar have been reported in Sheradil community forest.

C. Debris/Solid Waste Management and Hazardous Materials

- With few exception most of the generated debris are already managed in-situ by the eligible HHs. Any hazardous waste were not reported in the settlement. Solid waste like

empty cement bags, metal scarps generated during construction will have minimal impact.

D. Socioeconomic and Cultural Features

- The project area is a heterogeneous community where indigenous households and other households live together in scattered distribution. Out of 25 HHs in the community, 2 HHs are indigenous HHs, 3 HHs are from Dalits and remaining 20 HHs are from Brahmin/Chhetri. Of the total HHs 4 HHs are women headed. (Annex-II, Eligible HHs).
- The settlement is a mixed community where indigenous households and other households live together.
- There are only 2 Indigenous HHs and they do not have collective attachment to the area.
- Due to the road access and decreasing availability of firewood, most of the beneficiaries HHs are gradually shifting from traditional firewood to Liquefied Petroleum Gas (LPG) as cooking fuel;
- The major source of livelihood is agriculture and labor works.
- School and public health post is located in half hour distance within the settlement.

E. Water and Sanitation

- The source of water for drinking facility is spring and it is found to be adequate for drinking purpose; sanitation condition was also found satisfactory at the project settlement. Likhu Khola River is located nearby the settlement.

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 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. and 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.

G. Any Sensitive Site

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

7. Feedback of 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-situ while a few of them are using agriculture land where no options exist.

- 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 Sheradilsettlement 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 Social Issues	Mitigation measures	Mitigation measure cost	Responsibility		Remarks
				Implementation	Supervision	
1.	Impacts from the supply and purchase of construction materials (aggregates, stone and sand) from local market on the local community	<p>Aggregates will be purchased from suppliers or at market (Dhikure and Battar). Quarry operators supply the materials from approved quarry sites which are near ward number 3 & 4 of Thansing within 1 Km from the settlement. District Coordination Committee (DCC) former District Development committee (DDC) is the licensing authority for the quarries, and is responsible to monitor the licensed quarry sites and enforce compliance to environmental mitigations.</p> <p>Timber will be sourced from demolished house salvage, from own farm land, distributed from government relaxation quota and from licensed local market at Dhikure and Battar. The Timber Corporation of Nepal, a government entity, also</p>	Contractor will be responsible to borne mitigation cost as a part of quarry site license approval clause.	Beneficiary Household/DL-PIU	<p>Monitoring by CL-PIU/mobile team and Third party.</p> <p>Monitoring findings will be shared with DCC.</p>	Aggregated suppliers and vendors are registered on concerned government authority to have permits to supply and sale the products.

SN	Environmental and Social Issues	Mitigation measures	Mitigation measure cost	Responsibility		Remarks
				Implementation	Supervision	
		supply additional timber to local market of the earthquake affected district.				
2.	Forest and Wild life	The requirement of timer will be fulfilled from the quantity salvaged, felling of standing timber trees on farmland owned by the beneficiaries, purchase from local market at Dhikure and Battar, purchase at subsidized rate distributed by the Timber Corporation of Nepal (TCN), a government owned entity and remaining unfulfilled need from the <i>Sheradil</i> CF.	Not applicable	Beneficiary Household/DL-PIU	Monitoring by CL-PIU/Mobile team and Third Party. Monitoring findings will be shared with DCC	
3..	The construction of small residential buildings will involve small scale civil works. Hence, there is health and safety risks of minor accidents and injuries.	Various training and awareness activities will be organized by DL-PIU, health and safety training and awareness is part of those training and awareness by DL-PIU. Masons and carpenters will be trained on relevant safety measures, and owners will be made aware of the safety risks and management.	The cost of health and safety awareness and training is internalized within the overall cost of training and awareness. Project Implementation Unit (PIU) as a part of annual work plan will develop environmental and social training, awareness and dissemination	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	
			plan and cost/ budget.			
4.	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	
5.	Build Back Better Opportunity – enhancement measures					
5.1	Health and sanitation	<p>In terms of prioritizing built back better opportunity need priority are :</p> <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 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.
5.2	Indigenous Peoples and other vulnerable groups including marginalized, poor,	<p>Mitigation measures include:</p> <ul style="list-style-type: none"> • Targeted communication and awareness to vulnerable group(e.g. 	This will not require additional mitigation cost.	DL-PIU/Mobile team (The team will	Monitoring by CL-PIU/NRA	The Government/Project is drafting a guideline for

SN	Environmental and Social Issues	Mitigation measures	Mitigation measure cost	Responsibility		Remarks
				Implementation	Supervision	
	woman headed households, disabled people	<p>organizing consultation in areas accessible for women and people with disabilities.) on:</p> <ul style="list-style-type: none"> ○ Awareness on efficient usage of water and WASH ○ Information about the project, grant, training opportunities ○ Awareness campaign on indoor pollution and its health effects ● 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, 		ensure that vulnerable groups are targeted and their participation in ensured through district project team mobilization)		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

SN	Environmental and Social Issues	Mitigation measures	Mitigation measure cost	Responsibility		Remarks
				Implementation	Supervision	
		paperwork for installments/tranche, etc.)				
5.3	Loss of productive agricultural land in the settlement area	Organize awareness program and distribute awareness materials in relation to prevention of loss of productive agricultural land in and around the settlement area	The cost of awareness activities is internalized within the overall cost of training and awareness.	DL-PIU	CL-PIU/NRA	CL-PIU will submit copy of awareness event to Bank
5.4	Other build back better opportunities	Explore opportunities for synergies and building back better through collaboration with other agencies including government and NGOs/INGOs which are already engaged in these sectors in the district.	This will not incur mitigation measure cost. Only coordination cost will be incurred.	DL-PIU	CL-PIU/NRA	

9. Conclusions and Recommendations

The major conclusions on the environmental and social issues are;

- There will be no significant adverse impact on physical cultural resources, archeological and wildlife habitat due to sub-project reconstruction activity; Health and safety aspects of house reconstruction by the owner will be addressed by the training and awareness to be carried out by the DL-PIU.
- 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, distributed volume according to government relaxation quota and purchase from Timber Corporation of Nepal (TCN) will fulfill the additional demand of additional 44.25 cum whereas, 300 cum stone will be fulfilled from nearby DDC approved quarry sites within the settlement of Thansing VDC wards 3 & 4. Therefore, impact on forest and quarry sites will be low or unlikely;
- The total beneficiary household do not lie under zone of influence of flood and landslide;
- Land acquisition and involuntary resettlement is not required; and
- There will be no adverse impacts on vulnerable groups (Dalit, IPs and female headed households). IPsHHs 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 stone, timber, bricks, aggregates and other construction materials from quarry and local market. The potential impacts and mitigations are summarized in Table -1. There is no need for further Environmental Assessment.

- The sub-project does not entail land acquisition or involuntary resettlement thus Resettlement Action Plan (RAP) is not required. The project area is a mixed community where indigenous households and other households live together. 2 HHs out of 25 HHs in the community are indigenous HHs who are scattered within the settlement. Indigenous Population do not have collective attachment to the area. 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 will not be prepared. But, Measures to ensure that the vulnerable groups including indigenous peoples are not excluded during project implementation and they are able to maximize benefits from the project are discussed in Table -1.

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Annexes**Annex I: Environmental and Social Safeguard Screening Checklist**

1.	Project Title	Earthquake Housing and Reconstruction Project (EHRP)
2.	Project District	<i>Nuwakot</i>
3.	Name of the VDC/Municipality	<i>Thansing VDC</i>
4.	Name of the Settlement, Ward No.	<i>Sheradil-4</i>
5.	Number of eligible households:	25 HHs
6.	Altitude of the Settlement (in meters)	606 masl
7.	Nearest road head/highway/headquarter	<i>Tokha-Chhahare Highway/13 km from headquarter</i>
8.	Settlement ID/no	28-59-4-10
9.	Proposed Date of Commencement of Work:	January 5, 2017
	Number of houses damaged	25 Houses
	Number of houses to be reconstructed	25 Houses
	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 44.25 cum Timer and about 300 cum stone is needed and brick of 3,97,425 numbers
	Any hazardous materials mixed with debris (e.g. from damaged health-posts, medicines, from agro-vet 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).	NA
	House/ shelter should not be located in protected area, and forest.	NA
	Any activity, including material quarrying, resulting significant conversation or degradation of critical natural habitat is not permitted	NA
	Use of any public PCR in private home reconstruction is not permitted.	NA

S.No	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
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
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		√ √ √	OP 4.11

	cultural resources?			
5.	Will the sub-project involve significant conversion or degradation of critical or non-critical natural habitats?		√	OP 4.04
6	Does the sub-project involve involuntary land acquisition or prior acquisition of land or demolition of existing structures?		√	OP 4.12
7	Are there any ethnic minority communities present in the project area? Are they adversely impacted by the proposed sub-project?	√	√	OP 4.10
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?		√	
2	Is the settlement located close to groundwater sources, springs, surface water bodies, riverbank, and watercourses?		√	
3	How is the terrain? –flat, ridge, undulating, terraced, valley, tar etc.		√	Toe part of the hill with most farming land
4	Any history of erosion, flashflood, landslides, earthquake in the area/ vicinity?		√	
5	Current land use practice (agriculture, grazing, barren, forest, shrubs-----)		√	Mostly agricultural land and forest area
6	Is the subproject located on prime agricultural land?		√	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?		√	
8	Any existing/approved/ potential quarry sites (sand, aggregate, stone, slates, boulders) in the vicinity of the sub-project?		√	Likhu River bank at the side of Thansing VDC ward no. 3 & 4 had obtained approval from DDC, Nuwakot
9	Are there any potential sites/land for debris management/ solid waste management/ reclamation for		√	Not required. People havemanaged their

	future use?			waste from HHs level
10	Are there any areas or features of high landscape or scenic value on or spots with unique feature in and around the location which could be affected by the project? (examples, viewing point/ ridge/ peak, water-fall, cave, cliff etc)		√	
11	Any risks (health and safety, location- cliff, ridge etc.) associated with the setting of the sub-project which needs to be taken care?		√	
Biological features				
1	Any critical habitat or ecosystem of importance? Is the subproject located in or adjacent to a protected areas/ national forests, wilderness areas, wetlands (Ramsar), biodiversity, critical habitats?		√	
2	If the subproject is located near the forest, what is the category of the forest- national, community, leasehold, religious etc.?	√		Sheradil Community Forest
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)	√		Langur & Wild Boar are reported rarely
	Is the settlement/ subproject area a known wildlife movement/ migration route or bird migration route?		√	
	Is there any water body, river, wetland etc known as important habitat (or renowned) for fishes or aquatic life? Any Ramsar site in the vicinity of the settlement/ subproject?		√	Likhu river is an important landmark for the settlement. It is not a Ramsar site. But the subproject activities are unlikely to have adverse impacts on Likhu River, and its watershed.
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?		√	
8	Does the sub-project implementation leads to harvesting of natural forests, timber, plantation development, or deforestation?		√	
9	Any NTFP or medicinal plants in and around the sub-project?	√		<i>Asparagus spp</i>
Socio-economic and Cultural Features				
1	Is the subproject located in a densely populated area?		√	25 HHs at settlement are scattered
2	How many people comprise a typical household?	√		Average HHs size is 6
3	How many households are without any land/shelter, any squatters?		√	Every HHs have their own private land
4	Is the subproject located near to the sites of archaeological/historical or cultural importance?		√	
5	Presence of minority/vulnerable/indigenous population in the area?	√		Of the Total 25 HHs, 3 HHs are Dalit, 2 Shrestha HHs are Indigenous and 4 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?		√	
7	What household and livelihood support activities typically take place within the affected community?	Agriculture and Labor work		
8	What are the typical building practices of the affected people and what are the different materials have they used in the past?	Stone Masonry with mud mortar, 1-2 story with Timber, Stone, Clay, Bamboo and Corrugated Sheets as major construction materials		
9	Will the project require displacement or relocation of persons in the affected area?		√	
10	Who are the vulnerable people in the population, also considering those affected by HIV/AIDS etc.?	√		IPs, Women Headed HHs and Dalit are different Vulnerable People

11	What is the current availability of water for drinking and personal hygiene,	√		Drinking water supply is adequate and sanitation condition is satisfactory
12	What is the current provision of social/infrastructure facilities (health posts, sub-health posts, schools, communications, road etc?)	√		Access of medical and school and earthen road
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.	√		4 HHs are women headed HHs
16	Are there any conflicts about the use of local resources		√	

	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?)		√	
	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			Technically sound reconstruction of houses
	Identify programs/ activities for coordination and linking for 'building better' and / or synergy.			Housing construction support of NRs 25,000 needs to be used as an opportunity to promote sanitations, re-used of salvaged materials, renewable energy (including solar power, Improved Cooking Stoves (ICS) or bio-gas etc

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.
 - Potential impact is not envisaged on the Sheradil Community Forest.
- (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:**
- 2 HHs belongs to indigenous people (IP), the Shrestha, 3 are Dalit HHs and 4 HHs are 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;**
- (v) **Land acquisition and involuntary resettlement:** Not need.
- (vi) **Further assessment/ investigation needed and next step.**
- (vii) **Need for any special study:** Not required
- (viii) **Preparation ESMP:**
- Environmental and Social impacts are nominal. However, the type of activities to be conducted, it is recommended that a simple yet comprehensive ESMP shown in table-1 (mitigation measures) commensurate with the potential adverse impacts is implemented. It is recommended that the ESSR provides a brief overview of key mitigation measures for the identified minimal adverse environmental impacts. Environmental..
- (ix) **Need for IPDP/VCDP:**
- The project area is a mixed community where indigenous households and other households live together. Other vulnerable groups (Dalits, female-headed and indigenous HHs) are also present in the area. 2 HHs out of 25 HHs in the community are indigenous HHs who are scattered within the settlement. Indigenous Population do not have collective attachment to the area. Thus a separate VCDP is not required.
- (x) **Need for IEE or EIA:** Not required
- (xi) **Any other requirements/ need/ issue etc:** Not applicable

**Screening Tool Completed and Reviewed by:
Environmental Specialist in the District Level -PIU:**

Title and Date: Sudeep Ghimire/20th April, 2017

Social Specialist in District Level -PIU:

Title and Date: Rishi Ram Bimali/20th April, 2017

Project Manager in District Level - PIU:

Title and Date: Sunil Raj Giri/DTO Chief/Project Manager

Presentation/ Briefing to DCC – ENRC done on: 25th April, 2017

Advice, comments, and suggestions from the DCC-ENRC are: in detailed minute attached in last portion of the compilation

Screening cleared by DCC – ENRC on: 22nd May, 2017

Annex II: Eligible HHs List of SheradilSettlement

S.N.	Beneficiary	Gender	Agreement No.	Ward	Village/Tole
1	Madhu Kumar Bhandari	M	28-59-4-0-1	4	Sheradil
2	Ambika Adhikari	F	28-59-4-0-2	4	Sheradil
3	Yem Bahadur Khadka	M	28-59-4-0-3	4	Sheradil
4	Basu Dev Dhakal	M	28-59-4-0-5	4	Ghore
5	Krishna Prashad Bhandari	M	28-59-4-0-6	4	Ghore
6	Babu Kaji Bhandari	M	28-59-4-0-12	4	Sheradil
7	Ram Bahadur Bhandari	M	28-59-4-0-13	4	Sheradil
8	Kalpana Bhandari	F	28-59-4-0-14	4	Sheradil
9	Ram Bahadur Bhattari	M	28-59-4-0-15	4	Sheradil
10	Rukmini Adhikari	F	28-59-4-0-23	4	Sheradil
11	Bal Kumari Adhikari	F	28-59-4-0-24	4	Sheradil
12	Ram Hari Adhikari	M	28-59-4-0-25	4	Sheradil
13	Dinesh Shrestha	M	28-59-4-0-26	4	Sheradil
14	Ram Bahadur Ojha	M	28-59-4-0-27	4	Sheradil
15	Shree Ram Adhikari	M	28-59-4-0-28	4	Sheradil
16	Kumar Bhandari	M	28-59-4-0-29	4	Sheradil
17	Deepak Kumar Bhandari	M	28-59-4-0-30	4	Sheradil
18	Ujjwal Adhikari	M	28-59-4-0-31	4	Sheradil
19	Indra Bahadur Shrestha	M	28-59-4-0-32	4	Satbise
20	Sambhu Bahadur Bhandari	M	28-59-4-0-33	4	Kushumithan
21	Suku Maan Mijar	M	28-59-4-0-34	4	Kushumithan
22	Ramesh Adhikari	M	28-59-4-0-35	4	Hyakule
23	Madhusudan Risal	M	28-59-4-0-36	4	Hyakule
24	Sesh Kant Adhikari	M	28-59-4-0-37	4	Hyakule
25	Gopi Nepali	M	28-59-4-0-81	4	Makichaur

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

आज तिथी २०६४/०९/१२ गते यस नुवाकोट जिल्ला, खिल्ला स्तरमा स्थानीय तहको हलमा स्थानीय विद्यालय अधिकारी श्री केसर वडापुर पश्चिम न्युकोट अध्यक्षतामा भूकम्प आवाप पुननिर्माण आयोजना अन्तर्गत वलित व्यक्तता गरिने वातावरणीय तथा खानामिड हानोड तथा स्वत-व्यापन प्रोजेक्ट/प्रतिवेदन उपर हलफल गरि यस सुकाव पेरा गर्नु पर्ने प्रस्तावले नेपाल सरकार भूकम्प आवाप पुननिर्माण आयोजना डिस्कना आयोजना कार्यालय इडई (DL-PIU) ले तयार पारेको खाकोड बिदुर-८, डेडरेमि मल्लिकी वातावरणीय तथा खानामिड हानोड स्तरमा स्वत-व्यापन प्रतिवेदन खासै खासिदु धानविदु, गा.वि.स. हाल लेखु-६, पुर डडनि-८ ठा वर वडा वलित हडडी वातावरणीय तथा खानामिड हानोड प्रतिवेदन उपर हलफल गरि निम्नानुसारको यस सुकावपेरा प्रदान गरियो।

उपस्थिति

१.	केसर न. पश्चिम	स्था- वि.अ, नुवाकोट	
२.	केसर मणि प.प.थी	स्था- वि.लगा म. वि. वि. डि.स. नुवाकोट	
३.	वेद प्रकाश गौडेल	(NRA) नुवाकोट	
४.	गोपबन्धु युगा	वि.सं. उ.प. खिल्लि	
५.	अमिका शर्मा	सा.प (वि.स. गा.पा) खिल्लि	
६.	राम बहादुर खड्का	इ.स. वि. प्रा-काठ	
७.	पुष्कर शर्मा रिमाल	व.का.फ. जि.स.स.स.	
८.	शारदा कान्छा	- ES, DLPIU, EHRP	
९.	जयकांत लोडा	- SDS, DLPIU, EHRP	
१०.	पद्म रत्न शर्मा	- जि.सं.सं. वि.सं.सं.	
११.	सन्धि लक्षाल	- DL-PIU, Nuwakot.	
१२.	शुभा विष्णु लक्षाल	- DLPIU Nuwakot	
१३.	राजन शर्मा	DLPIU Nuwakot	
१४.	सन्धि अधिकारी	- DTD	
१५.	जतिष राम रिमाल	SDS DLPIU/EHRP	
१६.	सुदिप शिर्षे	ES, DLPIU/EHRP	
१७.	उपेन्द्र शर्मा	उजा तथा कान्छाल जि.सं.सं.सं.	
१८.	सन्धु प्र.शर्मा	जि.सं.सं.सं., प्रमुख	
१९.	डि.प. हरि शर्मा नुवाकोट	जल उपकरण प्रकल्प व्यवस्थापन समिति	
२०.	शैल पुन	- नि.सं.सं.	

१) मिजि आवाप पुननिदाठे गर्दी पुत्राके छटाए विहडके देबनेके छेए) नई व्यवस्थापन गरी विरोध ध्याग दिनु वरि निर्णय गरियो।

२) मिजि आवाप गण्डेक शिलशिलामा आमे प्रयोग गरी वन तथा खानीका पार्त खेके प्रभावनाके छे गरी अवलम्बन गनु वरि method प्रयोग गनु पर्ने।

३) मिजि आवाप, जसमे जसके पुननिदाठे गरी वनजम्हा काठ के पुधुमा Alternative प्रयोग गरी नई जग्गाके जम्हा जम्हा कुन incentive दिनु वरि आवधान तथा वन विना के छे गरी २ water source वडाके कालागि पार्त (डिप) लगाउनु व्यवस्था तथा प्रवारेण गनु पर्ने।

४) घातकियड फाँट पा देविपडा, खेतिपार्त जग्गाके अतिक्रमण कुन गरी डालागि जग-खेतना छेलाउनु।

५) जम्हा गरीपडा पुननिदेनुलाई सुहाव संकेलन भएवगानीक फेलाउ गरी आवाप वडाके।

(Handwritten signatures and names follow)

Annex IV: List of Consultation

Name of VDC:Thansing,7

Name of Settlement:Sheradil

S.N	Name of Participants	Tole	Remarks
1	Ram Bahadur Oja	Sheradil	
2	Yam Bahadur Khadka	Sheradil	
3	Shreeram Adhikari	Sheradil	
4	Surendra Bhandari	Sheradil	
5	Madan Bhandari	Sheradil	
6	Ravi Bhandari	Sheradil	
7	Pitta Bahadur Bhandari	Sheradil	
8	Sukuman Mijar	Sheradil	
9	Babukaji Bhandari	Sheradil	
10	Bhuban Bhandari	Sheradil	
11	Padam Bahadur Thapa	Sheradil	
12	Ram Bahadur Bhattra	Sheradil	
13	Nirmala Bhandari	Sheradil	
14	Kamala Bhandari	Sheradil	
15	Ramsharan Thapa	Sheradil	
16	Madav Prasad Bhandari	Sheradil	
17	Dinesh Shrestha	Sheradil	
18	Debendra Thapa	Sheradil	

Annex V: Arial View of Sheradil Settlement in Google Map



Annex VI: Quantity Calculation Sheet for Sheradil

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

Type of house: Model no. SMC-2.1
and BMC-2.1

Reference:
MoUD/DUDBC

Total HHs: - 25

S. No.	Structure Wise	Materials					
		Stone (m ³)	Brick (#)	Cement (Bags)	Sand (m3)	Aggregate (m3)	Timber (m3)
1	Upto D.P.C. 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
Total (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		500.00					50.00
Additional Needed/House		30.00					1.77
Estimated Total Additional Amount		750.00	662,375.00	5,512.50	750.00	350.00	44.25
Additional Needed for Total HHs Based upon Brick:Stone= 60:40%		300.00	397,425.00	5,512.50	750.00	350.00	44.25

Note: *: - 1 m³ = 35.28 cft

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

Note: 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, there will be no influx of labour and no need for labour camp.