

# Environmental Compliance Monitoring Report

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Semiannual Report  
July 2019  
Project Number: 51190-001

## NEP: Disaster Resilience of Schools Project

Prepared by Central Level Project Implementation Unit (Building) for the Asian Development Bank.

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# Environmental Compliance Monitoring Report

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## Semi-Annual Report No.1

For 1<sup>st</sup> Half, 2019 (January – June)

Loan/Grant No.: L3702 and G0601/0602

ADB Project no. 51190-001

## Nepal: Disaster Resilience of Schools Project (DRSP)

June 2019

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UMA in association with  
ERMC-PACE-PRCS



## **ABBREVIATIONS**

ADB	–	Asian Development Bank
BoQ	-	Bill of Quantities
CLPIU	-	Central Level Project Implementation Unit
DRSP	-	Disaster Resilience Schools Project
DSC	–	Design and Supervision Consultant
DUDBC	–	Department of Urban Development and Building Construction
DLPIU	-	District Level Project Implementation Unit
EA	–	Executing Agency
EARF	-	Environmental Assessment and Review Framework
EEAP	-	Earthquake Emergency Assistance Project
EMP	-	Environmental Management Plan
EPR	-	Environment Protection Rules
GON	–	Government of Nepal
GRC	–	Grievance Redress Committee
IA	–	Implementing Agency
IEE	-	Initial Environmental Examination
LOC	-	Land Ownership Certificate
MoSTE	-	Ministry of Education, Science and Technology
PAM	–	Project Administration Manual
PD	–	Project Director
PIU	–	Project Implementation Unit
PPE	-	Personal Protective Equipment
RE	-	Residence Engineer
REA	-	Rapid Environment Assessment
RECON	-	Re-construction
SE	-	Site Engineer
SM	-	Safeguards and GESI Monitors
SSDP	-	School Sector Development Plan
TLC	-	Temporary Learning Center



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## **Executive Summary**

1. The proposed project will improve disaster resilience of the school infrastructures and communities in the 14 districts of Nepal. The project is being financed for the school infrastructure investment, disaster risk management, and institutional strengthening and capacity building. More specifically, the project has targeted upgrading 130 schools through reconstructing and 180 schools through retrofitting the damaged buildings. Currently, the project has undertaken the Reconstructions through first phase of (Recon1) while the second phase (Recon2) will be rolled out by September 2019. The field investigation and survey work for the Retrofitting component is ongoing and it will cover the 8 districts namely, Kathmandu, Bhaktapur, Kavrepalanchok, Sindhuli, Sindhupalchowk, Okhaldhunga, Ramechhap and Dolakha.
2. This project is categorized as Category "B" in terms of both Environmental and Social Safeguards with the requirements of ADB SPS 2009. In accordance with ADB's SPS 2009, an environmental assessment and review framework (EARF) is in place providing guidance for environmental screening, impact assessment, safeguard planning, and implementation. The Framework has considered the environmental management plan (EMP) suggested in the IEE. The government has endorsed the EARF.
3. Design Supervision Consultant (DSC) team consisting of Environment Safeguards Specialist/Expert has already been mobilized and has prepared the Safeguards Monitoring Checklists covering all the issues mentioned in IEE and EMP. Moreover, Safeguards and GESI Monitors have also been mobilized at the district level. The Environment Safeguards Expert had provided orientation to Resident Engineers and the safeguard monitors dated 19 May 2019 about safeguards related issues and requirements and filling up the checklist prepared by the experts. Reporting on the safety observation checklist had also been discussed during the orientation. The monitors are filling the checklist on a monthly basis for each construction sites for EMP compliance monitoring which is being compiled and submitted in a monthly progress report.
4. The principal service of DSC is to support the CLPIU and 13 DLPIUs with comprehensive technical assistance to reconstruct, retrofit, and upgrade about 330 earthquake-damaged schools in the 14 earthquake most-affected districts of Nepal by providing technical and management assistance through technical surveys and assessment, development of architectural and structural designs, procedures and processes to rebuild affected schools, training and capacity building, procurement of civil works, construction supervision, and financial management of the project civil works.
5. All the proposed schools are situated in the hilly region of the country. As Nepal is among the most hazard-prone countries in the world; earthquakes, landslides and floods are the most common and severe hazards in the country. The frequency and intensity of weather-related hazards, notably landslides, floods and droughts, may increase in Nepal due to climate change. Seismic events have the potential to trigger secondary hazards including landslides, floods, and fires. However, there is no protected areas, wetlands, mangroves, or estuaries in or near the project sites.
6. Till date the DSC, with the assistance from the Safeguards Monitors carried out (i) the for the formation of Safeguards Desk at DLPIUs, (ii) establishing grievance redress mechanism with the formation of Grievance Redress Committee (GRC1) at school level; and (iii) formation of GRC2 at DLPIU level. In addition, they are also providing the supervision and guidance to the contractors and workers on the safety practices during construction.
7. GRC2 and Safeguards has been established in all DLPIU level. Formation of GRC1 at school level is under progress and will be completed by 15 August 2019. Altogether, GRC1 has been established in 64 schools among 67 RECON1 schools. However, no any grievances are recorded until date after establishment of GRCs. Similarly, Safeguards Desk has been established in all DLPIUs.
8. There are 67 schools in Recon1, under construction, however the progress is quite varied in that some schools are just completing the foundation works while others have completed the structural works and even begun the internal works such as brick and partitions. The major ongoing works are rebar and form works, concreting works, brick masonry works, installation of doors, windows etc. Recon2 has been started from June 2019 with a planned award in



9. Safety is the major concern during the school construction activities like excavation of trenches for the foundation; reinforcement works, rebar fabrication, concreting of column, slab etc. As required, the contractors have taken life insurance policy cover in-groups in different life insurance companies. However, the construction contractor has provided PPE to the worker, the quality of PPEs need to be improved. While the contractors had first aid box in place.

10. Contractor have erected labour camps within the construction site and school building in most of the under-construction schools. The camps are constructed using zinc sheets in most of the cases and in few cases, the unused old building spaces have been allocated as the labour camps. Housekeeping of the construction materials is another main issue to be improved by the construction contractor. The main constrain of the housekeeping is to the lack of adequate space in some sites.

11. Moreover, Issue related to landslide and gully erosion is existed close to the 16 under construction schools. Whereas the under construction school buildings are safe from landslide. Good housekeeping is well maintained in 45 schools under construction. 46 schools are under construction emitting insignificant dust in the ambient environment. Similarly, 55 schools have established emergency phone numbers at the vicinity of under construction school compound. Labour camp is established close to the all under construction schools whereas 50 labour camps are operated maintaining hygiene whereas 48 labour camps have disposed waste generated from the kitchen safely. Construction contractor has made availability of first aid facility in 51 under construction schools whereas contractors in remaining school are requested to maintain such facility as soon as possible. Similarly, construction contractor in 35 under construction schools have maintained good safety signboards. Until date, no any fatal accident occurred due to the construction of schools under DRSP.

12. All the compliance status related to Environmental Management Plan as per IEE of project implemented under loan 3702 NEP has been monitored and complied.



## **1. Introduction**

### **1.1 Background**

13. The earthquake in April 2015 in Nepal caused 8,700 deaths and 22,500 suffered severe injuries. There was a physical damage costing more than \$7 billion mostly in 14 of the country's 75 districts. The Government of Nepal (GoN) requested and received support from a number of development partners, including the Asian Development Bank (ADB), to address the impacts of the damages. The immediate ADB's response was to finance the Earthquake Emergency Assistance Project (EEAP) to support the rebuilding of schools, roads and district-level government buildings, and to strengthen the country's resilience to future disasters. This project was approved in June 2015 and is expected to complete by June 2019. The Disaster Resilience of Schools Project (DRSP) was conceptualized to support in disaster risk reduction and meeting the school reconstruction needs. The Project aims in achieving School Sector Development Plan (SSDP) objectives to improve the quality & access to school education and management. School safety is identified as an explicit objective in the 2016-2023 SSDP being implemented by the Ministry of Education, Science, and Technology (MoEST), Government of Nepal (GoN).

14. The proposed project will improve disaster resilience of school infrastructure and communities in 14 districts of Nepal. The project will finance the school infrastructure investments, disaster risk management, and institutional strengthening and capacity building. More specifically, it will upgrade 130 district schools through reconstructing and 180 schools through retrofitting the damaged buildings. Currently, the project has undertaken the Reconstructions through first phase of (Recon1) while the second phase (Recon2) will be rolled out by September 2019. The field investigation and survey work for the Retrofitting component is ongoing and it will cover the 8 districts namely, Kathmandu, Bhaktapur, Kavrepalanchok, Sindhuli, Sindhupalchowk, Okhaldhunga, Ramechhap and Dolakha.

15. Recon1 has started since October 2018 with the last contract award in February 2019 with construction period of 18 months. The Design and Supervision Consultant (DSC) recruited under the ongoing EEAP project prepared the design and BoQ of 67 schools of Recon1. Similarly, EEAP DSC is preparing design and BoQ for 115 schools.

16. The DSC recruited under the DRSP is mandated to review the design and drawings, BoQ, and bidding documents for the 115 schools planned to be undertaken in Recon 2. The DSC will prepare the design and drawings, BoQ, and bidding documents for Retrof1 and 2, provide assistance for bid evaluation of the Recon2 and Retrof1 and 2, and supervise all Recon1 and 2 and Retrof1 and 2 civil works contract packages. Altogether, there are 182 schools that have been identified for the reconstruction and 158 schools have been identified (tentatively) for the retrofitting works. These schools are spread over the 14 most earthquake affected districts. The contracts for the 67 schools under Recon1 are in different stages of implementation. The design review of the 115 schools has been completed and so has the packaging been completed. Altogether 9 contract packages have been planned for tendering of Recon2 which will be started from June, 2019 with a planned award in September, 2019.

### **1.2 Objectives**

17. The major objective of the project is; increased disaster resilience of schools and communities and improved learning environment.

The project shall comprise;

- i. Reconstruction and improvement of heavily damaged schools, to include reconstruction of approximately 163 public schools (including improved facilities), and installation of solar power at approximately 130 schools;
- ii. Retrofitting of unsafe schools and reduction of disaster risk, to include development of retrofit for schools in hilly, mountainous and remote communities, retrofitting of approximately 138 public schools, and preparation and approval and field-testing of



- disaster risk management action plans in reconstructed and retrofitted schools; and
- iii. Strengthening of institutional capacity for disaster resilience, to include enhancements to the Borrower's Education Management information System to improve school building inventory, training of approximately 336 government engineers and engineers and approximately 336 masons for disaster resilient construction, development and endorsement of a comprehensive user manual for disaster risk reduction implementation in rural communities, and completion of a scalable pilot in approximately 3 schools on community driven retrofitting.

### **1.3 Project category**

18. This project is categorized as Category B in terms of both Environmental and Social Safeguards with the requirements of ADB SPS 2009. Hence, an initial environmental examination (IEE) and environmental management plan (EMP) were prepared in ADB format and 67 schools are awarded for reconstruction. The updated IEE report had been disclosed in web in accordance with ADB's Safeguard Policy Statement (2009). The IEE report envisioned that the implementation of school infrastructure is expected to improve environmental sustainability and is unlikely to have significant adverse environmental impacts. Impacts, if any, will largely be short-term, local, reversible and of low significance.

19. Similarly, the National Environment Protection Act, 1997 and Environmental Protection Rules, 1997, establish the requirement for environmental assessment in Nepal. The procedures are defined in the Environment Protection Rules, as amended. School Infrastructures requiring IEE level study according to EPR are::

- Construction of residential or commercial building and their combination with a built-up area or floor area between 5,000 to 10,000 sqm;
- Development of site with cutting or filling of more than 20,000 cum. earth;
- Construction of buildings above 10 stories or 25m height to 16 stories or 50m height;
- Construction work that may require clearing of up to 5 ha. forest area;
- Any construction works not listed in the schedule of EPR and that cost between Rs.50 million to Rs.250 million will require IEE whereas construction work more than Rs. 250 million will require EIA.

### **1.4 Scope of activities and overview of project information**

#### **1.4.1 Scope**

20. The services by the DSC is to be provided over a period of four years of the DRSP project implementation. The principal service of DSC is to support the CLPIU and 13 DLPIUs with comprehensive technical assistance to reconstruct, retrofit, and upgrade about 330 earthquake-damaged schools in the 14 earthquake most-affected districts of Nepal by providing technical and management assistance through technical surveys and assessment, development of architectural and structural designs, procedures and processes to rebuild affected schools, training and capacity building, procurement of civil works, construction supervision, and financial management of the project civil works. The 14 districts currently targeted under the project are Dhading, Dolakha, Gorkha, Kathmandu, Kavre, Lalitpur, Bhaktapur, Nuwakot, Okhaldungha, Ramechhap, Sindhuli, Makawanpur, Sindhupalchok and Rsuwa.

#### **1.4.2 Implementation arrangements**

21. Environmental assessment and review framework (EARF) had been established in accordance with ADB's SPS 2009, to provide guidance for environmental screening, impact



assessment, safeguard planning and implementation. The Framework has considered the environmental management plan (EMP) suggested by the initial environmental examination (IEE) prepared for the Project considering six sample schools from two project districts<sup>1</sup>. The government has endorsed the EARF.

22. Design Supervision Consultant (DSC) Environment Safeguards Specialist/Expert has already been mobilized have prepared safeguard monitoring checklists covering all the issues mentioned in IEE and EMP. Moreover, Safeguards and GESI Monitors (one in each district) have also been mobilized at the district level. The Environment Safeguards Specialist/Expert had provided orientation to the Resident Engineers and the Safeguard Monitors on 19 May 2019 about the project safeguard related issues and filling up of the checklists prepared by the experts. The necessity of maintaining safety observation checklists had also been discussed during the orientation. The monitors are filling the checklist on a monthly basis for each of the under construction schools and monthly progress reports are being submitted.

23. The IEE and DDR shows substantial net positive environmental benefit including;

- (i) Overall impact of the Project is anticipated to be positive with the community and students inclusive of the indigenous people benefitting by having good quality education in a decent learning environment. improved health and safety during construction;
- (ii) Impacts anticipated during implementation will be mostly reversible, of minor significance confined in subproject area for a short duration during construction phase only

24. The Safeguards Experts of the DSC, with assistance from the Safeguards and GESI Monitors are performing the following activities:

- (i) Formation of Safeguards Desk at DLPIUs
- (ii) Establishment of grievance redress mechanism with the formation of Grievance Redress Committee (GRC1) at school level;
- (iii) Formation of GRC2 at DLPIU level;
- (iv) Filling up of the checklist by Safeguards and GESI Monitors prepared by Safeguards Experts ;
- (v) Preparation of safety observations reports with photographic evidence and filling safety checklists;
- (vi) Supervision and guidance to the contractors and workers to properly carry out the safety practices during construction; and
- (vii) Organizing formal and informal meeting and orientation in schools and DLPIU level.

### **1.4.3 Description of the environment**

25. The proposed schools are situated in the hilly region of the country. As Nepal is among the most hazard-prone countries in the world; earthquakes, landslides and floods are the most common and severe hazards in the country. The frequency and intensity of weather-related hazards, notably landslides, floods and droughts, may increase in Nepal due to climate change. Seismic events have the potential to trigger secondary hazards including

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<sup>1</sup> **Ramechhap District-** (i) Shree Secondary School, Jyamirekhani, Likhu Rural Municipality-6, (ii) Shree Tamakoshi Janajagriti Secondary School, Khimti Bazar, Likhu Rural Municipality-6, and (iii) Shree Secondary School, Sikral, Gelu, Manthali Municipality-12; **Dolakha District-** (i) Shree Aajadi Secondary School, Birauta, Melung Rural Municipality-7, (ii) Mahendrodaya Secondary School, Mati, Bhimeshwor Municipality-5 and (iii) Kutidanda Secondary School, Makaibari, Bhimeshwor Municipality-12



landslides, floods, and fires. However, there is no protected areas, wetlands, mangroves, or estuaries in or near the project sites. The students will have a better school infrastructure with earthquake resilient safe classrooms, and improved basic facilities like water supply, sanitation, laboratories, libraries, and computer learning centres. Percentage of student enrolment may increase due to improvement in the learning environment and availability of better learning facilities. Improved school infrastructures will have beneficial impact upon students, teachers, and school and local communities.

### **1.5 Project safeguards team**

26. The project safeguard team supporting the DRSP (L-3702 NEP) is presented in the following table.



Table 1- 1: Project safeguard support team

S. No.	Name	Designation/Office	Email Address	Roles
CLPIU				
	Youb Raj Paudyal	Deputy Project Director, CLPIU	<a href="mailto:yrpauldval@gmail.com">yrpauldval@gmail.com</a>	Implementing agency and will look after the overall safeguards compliance to of the project
	Udhab Nepal	Civil Engineer, CLPIU	<a href="mailto:Edhab73@gmail.com">Edhab73@gmail.com</a>	
	Suraj Parajuli	Engineer, CLPIU		Environment Safeguards Focal Person
	Kiran Kumari Lekhak	Section Officer, CLPIU		GESI/Social Safeguards Focal Person
2. DLPIUs				
	Dillishwor Pradhan	DLPIU, Unit Chief, Bhaktapur	<a href="mailto:Dspradhan61@gmail.com">Dspradhan61@gmail.com</a>	GRC2-Chair
	Arjun Rayamajhi	DLPIU, Unit Chief, Kathmandu	<a href="mailto:Arjuner15@gmail.com">Arjuner15@gmail.com</a>	GRC2-Chair
	Dwarika Pd. Pokharel	DLPIU, Unit Chief, Kavrepalanchok	<a href="mailto:Dwarikapokharel164@gmail.com">Dwarikapokharel164@gmail.com</a>	GRC2-Chair
	Shiba Kumar Sapkota	DLPIU, Unit Chief, Sindhuli		GRC2-Chair
	Dilli Ram Luintel	DLPIU, Unit Chief, Okhaldhunga		GRC2-Chair
	Nirmal Kumar Ghimire	DLPIU, Unit Chief, Ramechhap	<a href="mailto:dlpiu.ramechhap549@gmail.com">dlpiu.ramechhap549@gmail.com</a>	GRC2-Chair
	Yam Bahadur Khadka	DLPIU, Unit Chief, Sindhupalchwok	<a href="mailto:Khadkaybk@gmail.com">Khadkaybk@gmail.com</a>	GRC2-Chair
	Dev Kumar Baral	DLPIU, Unit Chief, Dolakha		GRC2-Chair
	Ajay Kr. Shah	Engineer, DLPIU, Bhaktapur	<a href="mailto:ajay6456@gmail.com">ajay6456@gmail.com</a>	Environment Safeguards Focal Person
	Shyam Babu Sha	Technical Assistant, DLPIU, Bhaktapur		GESI/Social Safeguards Focal Person
To support and resolve complaints/grievances as quickly as possible at the local level through a process of consultation; and, if that is not possible, to provide clear and transparent procedures for appeal.				
Responsible for monitoring compliance by using standard monitoring checklist prepared by ES for each individual school. The DLPIU will verify and submit safeguard monitoring report in a standard format to CLPIU and ADB. The reports will contain summary of work progress during the reporting period, quality of safeguards compliance, recommended corrective actions, and follow-up on corrective actions agreed in the last report.				
Responsible for undertaking overall environmental social and GESI compliance in the subproject activities in the district.				



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S. No.	Name	Designation/Office	Email Address	Roles	
				Environment Safeguards Focal Person	GESI/Social Safeguards Focal Person
	Rajendra Shrestha	Engineer, DLPIU, Dolakha		Environment Safeguards Focal Person	GESI/Social Safeguards Focal Person
	Pratik Raj Karki	Engineer, DLPIU, Dolakha		Environment Safeguards Focal Person	GESI/Social Safeguards Focal Person
	Sovit Shrestha	Engineer, DLPIU, Kavrepalanchok		Environment Safeguards Focal Person	GESI/Social Safeguards Focal Person
	Yadu Bikram Thapa	Engineer, DLPIU, Kavrepalanchok	<a href="mailto:yadu2038@gmail.com">yadu2038@gmail.com</a>	Environment Safeguards Focal Person	GESI/Social Safeguards Focal Person
	Sagar Paudel	Engineer, DLPIU, Kathmandu	<a href="mailto:poudelsagar47@gmail.com">poudelsagar47@gmail.com</a>	Environment Safeguards Focal Person	GESI/Social Safeguards Focal Person
	Kopila Gyawali	Section Officer, DLPIU, Kathmandu		Environment Safeguards Focal Person	GESI/Social Safeguards Focal Person
	Anil Kumar Yadav	Engineer, DLPIU, Sindhuli	<a href="mailto:yanil0070@gmail.com">yanil0070@gmail.com</a>	Environment Safeguards Focal Person	GESI/Social Safeguards Focal Person
	Durga Prasad Kafle	Section officer, DLPIU, Sindhuli		Environment Safeguards Focal Person	GESI/Social Safeguards Focal Person
	Sabin Lama	Engineer, DLPIU, Okhaldhunga		Environment Safeguards Focal Person	GESI/Social Safeguards Focal Person
	Om Prasad Gautam	Section officer, DLPIU, Okhaldhunga		Environment Safeguards Focal Person	GESI/Social Safeguards Focal Person
	Sundar Shyam Ghimire	Engineer, DLPIU, Ramechhap		Environment Safeguards Focal Person	GESI/Social Safeguards Focal Person
	Kumar Prasad Subedi	Non Gazetted First class, DLPIU, Ramechhap		Environment Safeguards Focal Person	GESI/Social Safeguards Focal Person



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Name	Designation/Office	Email Address	Roles
Sher Bdr Pujara	Engineer, DLPIU, Sindhupalchok	<a href="mailto:sherp7@gmail.com">sherp7@gmail.com</a>	Environment Safeguards Focal Person
Monika Joshi	Sub-Engineer, DLPIU, Sindhupalchok		GESI/Social Safeguards focal person
Indra Lal Maharjan	Engineer, DLPIU, Lalitpur		Environment Safeguards Focal Person
Bichari Prasad Adhikari	Section officer, DLPIU, Lalitpur		GESI/Social Safeguards focal person
Baburam Devkota	Engineer, DLPIU, Gorkha		Environment Safeguards Focal Person
Jyoti Thapa Magar	Sub-Engineer, DLPIU, Gorkha		GESI/Social Safeguards focal person
Suman Pokhrel	Engineer, DLPIU, Nuwakot		Environment Safeguards Focal Person
Bodhraj Pathak	Section officer, DLPIU, Nuwakot		GESI/Social Safeguards focal person
Pradip Sharma	Engineer, DLPIU, Rasuwa		Environment Safeguards Focal Person
Manohar Dhakal	Sub-Engineer, DLPIU, Rasuwa.		GESI/Social Safeguards focal person
Sandip Adhakari	Engineer, DLPIU, Makwanpur		Environment Safeguards Focal Person
Harichandra Sapkota	Section officer, DLPIU, Makwanpur		GESI/Social Safeguards focal person



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Name		Designation/Office	Email Address	Roles	
Nirmal Bogati		Engineer, DLPIU, Dhading		Environment Safeguards Focal Person	
Sher Bahadur Khatri		Sub-Engineer, DLPIU, Dhading		GESI/Social Safeguards focal person	
<b>3. DSC-Safeguards Experts</b>					
Rikesh Chitrakar		Environment Safeguards Expert/KTM head quarter	chitrakar.rikesh@gmail.com		Implementation, monitoring and reporting of environmental safeguards works of DRSP Schools of L-3702 NEP
Ratna Meher Bajracharya		Social Safeguards Expert/KTM head quarter	ratna.mehar.b@gmail.com		Guide and monitoring and supervision of social safeguards works of DRSP Schools of L-3702 NEP
Prakash Panday		GESI Expert/KTM head quarter	ppanday029@hotmail.com		Monitoring, supervision and implementation of GESI action plan of DRSP Schools of L-3702 NEP
<b>3. DSC Safeguards and GESI Monitors</b>					
Ambika Ghimire		Sindhupalchok	ambika.ghimire45@gmail.com		Supporting the project in implementing environmental and social safeguards requirements by educating, data collection and monitoring the activities during the construction phase
Anjila Poudel		Okhaldhunga	anilap620@gmail.com		
Deepa Katuwal		Ramechhap	dipakat15@gmail.com		
Nabina Karki Gautam		Bhaktapur	karkinabina99@gmail.com		
Nabina Tiwari		Kathmandu	tiwarina123@gmail.com		
Roshan Poudel		Sindhuli	ros.pdl2003@gmail.com		
Saroj Koirala		Kavre	envsaroj@gmail.com		
Shova Subedi		Dolakha	shova9.subedi@gmail.com		

### 1.6 Overall project progress and status

27. There are 67 schools in Recon1, under construction. The progress is quite varied in that some schools are just completing the foundation works while others have completed the structural works and even begun the internal works such as brick and partitions. The major ongoing works are rebar and form works, concreting works, brick masonry works, installation of doors, and windows etc. The contracts for the 67 schools under Recon1 have been awarded and are in different stage of implementation. The initial design review of the 115 schools has been completed for Recon2. Recon2 has been started from June 2019 with a planned award in September 2019.



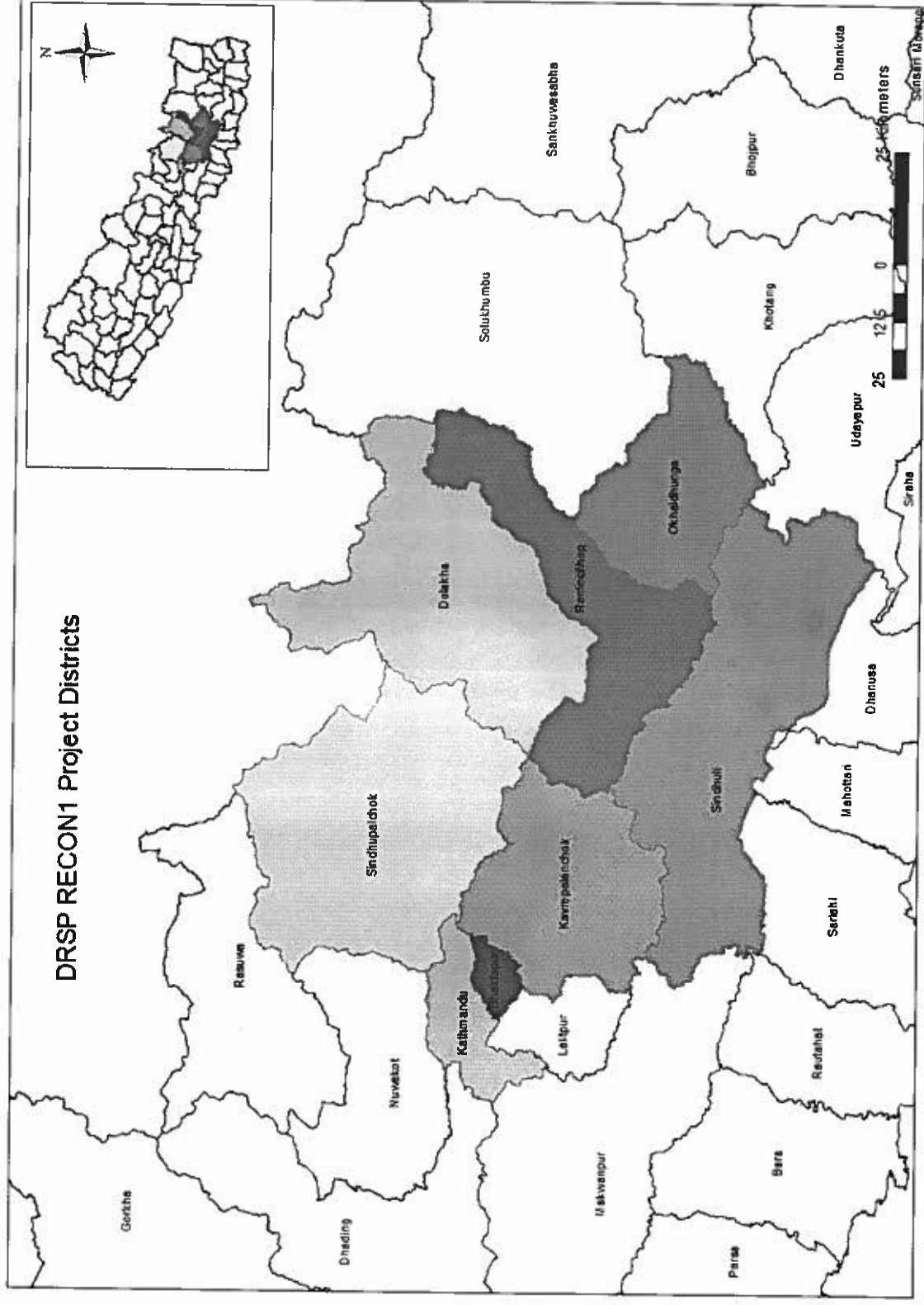


Figure 1-1: DRSP Recon1 Project Districts.



### **1.6.1 Description of safety status of schools implemented**

28. Safety is the major concern during the school construction activities like excavation of trenches for the foundation; reinforcement works, rebar fabrication, concreting of column, slab etc. Most of the under construction activities are done in traditional style using construction materials such as wood, ply wood, re-bars, iron poles and bamboo for the support of under construction permanent structures like slab and column and for barricade. Zinc sheets are being used by some of the contractors for fencing and barricading around the construction site. Contractors have constructed hard and soft barricades around the construction sites as per requirement and site conditions. Unauthorized persons including schoolchildren are prohibited entering into the under-construction area. Most of the proposed school are operating in temporary learning centers (TLCs) with the under-construction school buildings situated within the school premises.

29. As required, the contractors have taken life insurance policy cover in-groups in different life insurance companies. The construction contractors have provided PPE to the workers, however, the quality of PPEs need to be improved. While the contractors had first aid box in place with some bandage, packets of rehydration powder and paracetamol tablets, further improvement can be made on the adequacy. Instructions have given to maintain safety signboards around the construction site. The contractor have erected project information boards at the entry gate of under- construction schools.

30. Working at heights (as some of the buildings are 3 storied height- approx. 12m) is one of the major safety concern faced in all the under construction sites. As most of the contractors following the traditional practice of platform erection for the working at heights without harness and belts, the practice has become susceptible to potential accidents. Therefore, it is suggested to establish safety platform using local materials such as bamboo, wood etc. which should have the safety barriers to prevent falling. In addition, suggestions have been made to use harness while working height of more than 2 meters above the ground level.

31. Contractor have erected labour camps within the construction site and school building in most of the under-construction schools. The camps are constructed using zinc sheets in most of the cases and in few cases, the unused old building spaces have been allocated as the labour camps. Further, recommendation has been made to improve ventilation, lighting, and sanitation condition of the camp area. In a few cases, separate toilets are constructed with the excavation of pit and with zinc roof for workers whereas in most of cases the workers are using old toilets of the school.

32. Housekeeping of the construction materials is another main issue to be improved by the construction contractor. The main constrain of the housekeeping is to the lack of adequate space in some sites. However, contractors were instructed to maintain good housekeeping practices and managing all the construction wastes. There were significant number of used cement bags generated during the time of concreting of slabs and columns in the site. Therefore, the contractors were instructed to store the used bags properly and reuse as far as possible. Contractors have now started improving the housekeeping practices.

33. In some of the sites, the contractors have supplied potable water to labour workers in labour camps. Water has been supplied from water tankers for washing and kitchen purpose.

34. Any sort of non-compliance or safety issue are being closely monitored. A Health and Safety checklist has been prepared and the Safeguards and GESI Monitors have started using the same with contractor in the loop. The forms have been designed with compliance



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reporting with photographic evidences on a time bound action plan. The use of checklist has proven to be effective, thus the observed issues are being addressed, and complied.



## 1.6.2 Environment, Health and Safety Status of the under construction schools in DRSP project districts

Table 1-1: Environment, Health and Safety status of DRSP District Schools

ues	Okhaldhunga	Sindhuli	Ramechhap	Dolakha	Sindhupalchowk	Kavre	Bhaktapur	Kathmandu
Emergency phone numbers in place	Contractors are requested for emergency telephone numbers in place soon. Meetings and minutes at filed level carried out in this regards.	Emergency numbers are in place in 8 schools.	Emergency telephone numbers in place in all schools.	Phone numbers of nearby health post, school teacher, and contractor supervisor are in place in 8 schools.	7 schools out of 8 has placed emergency telephone number.	9 schools out of 10 have emergency telephone numbers in place.	Available in both under construction schools of Bhaktapur.	Available in school number 67 and instructed to make available soon in school 66.
Insurance	Contractor has informed that the insurance of worker has been purchased. Contractor is requested to make available document formally.	Yes.	Group insurance policy. In all 12 schools	Contractor is requested to make available document formally.	labour insurance of all 8 schools-Sagarmatha Insurance Company	Contractors have verbally assured that group insurance has done. Instructed to make available purchase document soon.	Yes	Contractor is requested to make available document formally.
Boxing	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adding and the	Zinc sheets, caution tape and bamboo are used for barricading. Instructed to improve barricade around the school.	Instructed to improve barricade around the school.	Some schools are with barricade partially. However, requested to complete the barricading as proposed date they have mentioned in meeting minute. (Within first week of July 2019).	Barricading around the most of the schools were yet to be improved, whereas, some schools were barricade partially. All the contractors supervisor is strictly instructed to barricade within the 15 July 2019.	Barricading along the schools are to be improved. Contractor supervisor and engineer have agreed to comply soon.	Partial Barricading in most of the school. Agreed for complete barricade soon.	Instructed to improve barricade around the school.	Yes



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ies	Okhaldhunga	Sindhuli	Ramechhap	Dolakha	Sindhupalchowk	Kavre	Bhaktapur	Kathmandu
Aid	Available. Instructed to improve the facility.	Instructed to improve the facility.	First Aid box in place. Instructed to improve the facility.	Instructed to improve the facility.	Instructed to improve the facility.	Instructed to improve the facility.	Available	Available
Alder	Contractor personnel have been involving.	Contractor site Engineer/ Focal Person	Site Supervisor is responsible person for first aid	Site supervisor	Site in charge	Site Supervisor	Safety supervisor	Site supervisor
'actor' onmen 'ance r	Requested contractor to appoint the assurance officer soon.	Requested contractor to appoint the assurance officer soon.	Requested contractor to appoint the assurance officer soon.	Requested contractor to appoint the assurance officer soon.	Requested contractor to appoint the assurance officer soon.	Requested contractor to appoint the assurance officer soon.	Requested contractor to appoint the assurance officer soon.	Requested contractor to appoint the assurance officer soon.
ishm f camp	Camps are established providing bed, lighting and water facility including cooking facility. Spring water available for the construction. In some cases, camps are established in rental houses.	Camp established with bedding, washing, and cleaning and toilet facility within the school premises in old school classrooms.	Established with bedding material, lighting, cooking, washing, and bathing facility.	Bedding material, lighting, cooking, washing, bathing facility within the school premises in old school classrooms.	Bedding material are well for summer but ventilation and lighting facility are established within the school premises in old school class rooms.	Camp established with accommodation and cooking facility within the school premises in old school classrooms.	Bedding material, lighting, cooking, washing, bathing facility available.	Established nearby the construction site. Cooking, washing, bathing facility available.
le y and ition camp	Available	Available	Available	Available	Available	Available	Available	Available
if y in s and it site	Electricity, LPG, locally available firewood.	Electricity, LPG, locally available firewood.	Electricity, LPG, locally available firewood.	Electricity, LPG, locally available firewood.	Electricity, LPG, locally available firewood.	Electricity, LPG, locally available firewood.	Electricity, LPG for cooking.	Electricity, LPG for cooking.



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ies	Okhaldhunga	Sindhuli	Ramechhap	Dolakha	Sindhupalchowk	Kavre	Bhaktapur	Kathmandu
ishment for ge ts for y	Instructed to have more safety boards around the school boundary and entrance gate. Requested contractor to improve safety.	Instructed to have more safety boards around the school boundary and entrance gate. Requested contractor to improve safety.	Requested contractor to maintain safety signage boards on the site by first week of August 2019.	In place, however yet to be improved in all schools.	Instructed to have more safety boards around the school boundary and entrance gate. Requested contractor to improve safety.	Instructed to have more safety boards around the school boundary and entrance gate. Requested contractor to improve safety.	Available.	Available.
of by ars	Instructed to improve use of PPE by worker.	Instructed to improve use of PPE by worker.	Most of the labour were found using the safety helmet and very few workers were using boot and gloves.	Practised, but yet to be improved.	80% of the worker are using hardhat, but workers do not properly use other safety gears.	Most of the labour were found using the safety helmet, jackets and very few workers were using boot and gloves.	Yes.	Yes.
of y ass ng in olding above nd	Made compulsory while working at height.	Instructed to maintain safety platforms while working at height.	Labours are not familiar using safety harness. Instructed to maintain safety platforms while working at height.	Not familiar with safety harness, however, Instructed to maintain safety platforms while working at height.	Instructed to maintain safety platforms while working at height.	Instructed to maintain safety platforms while working at height.	Instructed to maintain safety platforms while working at height.	Instructed to maintain safety platforms while working at height.
is ared to the menta	Plan in place however, instructed contractor to revise the plan.	No	Implemented	Implemented	No	Implemented	Implemented	Yes



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es	Okhaldhunga	Sindhuli	Ramechhap	Dolakha	Sindhupalchowk	Kavre	Bhaktapur	Kathmandu
st oise	Air and noise is acceptable condition	Not significant pollution	There were no huge issues of pollution due to construction work in any sites	Low	No	There were no huge issues of pollution due to construction work in any sites	There is no huge issue of pollution	No air pollution but noise pollution is there.
ance sing flow	No	Not significant impact	No	No	No	No	No	No.
keepi	Yes, however need more improvement	Moderate	Average	Good	Average condition	In overall housekeeping was average	Maintained	Average
ent	No	No	No accidents till date	No Fatal Accident	No	No	No	No
labour	No	No	No	No	No	No	No	No
ances	GRM established no grievance.	GRM established no grievance.	GRM established no grievance.	GRM established no grievance.	GRM established no grievance.	GRM established no grievance.	GRM established no grievance.	GRM established; no grievance recorded yet.

Note: Environment Safeguards Compliance Matrix has been maintained in Appendix 4. The Okhaldhunga district has scored low in environment, health, and safety status than other DRSP districts.

Table 1-2: Quantitative information related to Environment, Health, and Safety

SP Districts for CON1	Number of schools	Landslide issue	Construction waste well managed	Good house keeping	No air and dust during construction	Emergency phone number established	Labour camp established	Labour camps with hygienic kitchen	Labour camps with hygienic toilets	Safe disposal of waste generated from labour kitchen	First Aid facility available	Good safety sign boards installed
haldhunga	8	1	7	0	7	7	7	0	0	7	5	0
idhuli	13	3	9	9	13	8	13	11	9	10	13	7
mechhap	12	1	9	12	12	12	12	12	7	9	12	7
lakra	12	6	0	10	0	8	10	10	10	10	2	10
idhupalchowk	8	3	3	8	0	7	8	8	5	8	8	4
vrepalanchowk	10	2	6	4	10	9	10	5	2	0	7	3
aktapur	2	0	2	2	2	2	2	2	2	2	2	2



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SP Districts for CON1	Number of schools	Landslide issue	Construction waste well managed	Good house keeping	No air and dust during construction	Emergency phone number established	Labour camp established	Labour camps with hygienic kitchen	Labour camps with hygienic toilets	Safe disposal of waste generated from labour kitchen	First Aid facility available	Good safety sign boards installed
<b>himandu</b>	2	0	2	0	2	2	2	2	2	2	2	2
	<b>67</b>	<b>16</b>	<b>38</b>	<b>45</b>	<b>46</b>	<b>55</b>	<b>64</b>	<b>50</b>	<b>37</b>	<b>48</b>	<b>51</b>	<b>35</b>

The quantified data on environmental performance of the project is presented in the above Table 1-2. Issue related to landslide and gully erosion is existed close to the 16 under construction schools. Whereas the under construction school buildings are safe from landslide. Good housekeeping is well maintained in 45 schools under construction. 46 schools are under construction emitting insignificant dust in the ambient environment. Similarly, 55 schools have established emergency phone numbers at the vicinity of under construction school compound. Labour camp is established close to the all under construction schools whereas 50 labour camps are operated maintaining hygiene whereas 48 labour camps have disposed waste generated from the kitchen safely. Construction contractor has made availability of first aid facility in 51 under construction schools whereas contractors in remaining school are requested to maintain such facility as soon as possible. Similarly, construction contractor in 35 under construction schools have maintained good safety signboards. Until date, no any fatal accident occurred due to the construction of schools under DRSP.



**a) Action taken by DSC/Safeguards and GESI Monitors:**

- Orientation and coordination with contractors about the environment and social safeguards requirements and compliance in the contract.
- Formation of Safeguard Desks at DLPIUs, & GRC2. Formation of GRC1 at school level still ongoing.
- Regular monitoring of schools and filling of environment, social and GESI safeguards checklist.
- Filling of safety observation sheet for any non-compliance and safety issue-instructing contractor to comply within stipulated time.
- Aware workers to use Safety Gears
- Aware contractors about ADB Safety policy
- Consultation with Local people, Workers, Contractors representative

**b) Improvement after action:**

- Installation of signage boards, barricading around the construction area and use of PPE by labour are under progress.
- Accommodation and sanitation facilities are being implemented at the site.
- Contractors were aware about the sending the report after resolving the issues that was reported by SM.
- Workers were aware about the facility that they have to get from contractor side.
- Cleanliness of Labour camp and surrounding.

**c) Some instructions to contractor regarding Health and Safety issues:**

- **Barricade:** Contractors are instructed to install barricade around the trench excavated close to the building. Contractor are further instructed to install hard barricade around the school compound area to avoid unauthorized person entering into the school.
- **First Aid-** Contractors were instructed to improve first aid facility with availability of box in each construction site as well as to maintain the standard of first aid box.
- **OHS performance-** Contractors were also instructed to conduct occupational health and safety performance of their own work and shall be documented and submitted to DSC every month.
- **Safety instructions-** Contractors were made aware and instructed to maintain safety with proper barricade and safety sign boards to be in place at all ongoing trench and manhole construction and excavation site and unattended excavated sites.

**2. Compliance status of project**

35. The environment safeguard requirements have been assessed and it has been found that the project has thus far complied with the statutory requirements related to the safeguard environment with the consequences due to construction works. Moreover, formation of Grievance Redress Committee at school level (GRC1) is under progress. Whereas, GRC2 and Safeguards Desk have been established in all DLPIU.



Table 2- 1: Compliance status with national environment requirement

Project No.	Project Name	Statutory Environmental Requirements <sup>2</sup>	Status of Compliance <sup>3</sup>	Validity if obtained	Action Required	Specific Conditions that will require environmental monitoring as per Environment Clearance, Consent/Permit to Establish <sup>4</sup>
51190-001	DRSP	Initial Environmental Examination (IEE). Initial environmental examination (IEE) prepared for the Project considering six sample schools from two project districts. No clearance, permit/consent, forest clearance permits are required.	In accordance with ADB's SPS 2009, an environmental assessment and review framework (EARF) is in place providing guidance for environmental screening, impact assessment, safeguard planning, and implementation. The Framework has considered the environmental management plan (EMP) suggested in the IEE. The government has endorsed the EARF.	N/A	N/A	No permission required

Table 2- 2: Summary of GRC1, GRC2 and Safeguards Desk formation (June 2019)

Sn.	District Name	Number of school in RECON1	Formation of GRC1 at School level	Formation of GRC2 at DLPIU level	Formation of Safeguards Desk at DLPIU
1.	Okhaldhunga	8	7	Established	Established
2.	Sindhuli	13	13	Established	Established
3.	Ramechhap	12	12	Established	Established
4.	Dolakha	12	12	Established	Established
5.	Sindhupalchowk	8	8	Established	Established
6.	Kavre	10	8	Established	Established
7.	Bhaktapur	2	2	Established	Established
8.	Kathmandu	2	2	Established	Established
	<b>Total</b>	<b>67</b>	<b>64</b>		

<sup>2</sup> Specify (environmental clearance? Permit/consent to establish? Forest clearance? Etc.)<sup>3</sup> Specify if obtained, submitted and awaiting approval, application not yet submitted<sup>4</sup> Example: *Environmental Clearance requires ambient air quality monitoring, Forest Clearance/Tree-cutting Permit requires 2 trees for every tree, etc.*



36. GRC2 and Safeguards has been established in all DLPIU level. Formation of GRC1 at school level is under progress and will be completed by 15 August 2019. Altogether, GRC1 has been established in 64 schools among 67 RECON1 schools. GRC1 comprises 20% female members whereas GRC2 comprises 31% female among the members. However, no any grievances are recorded till date after establishment of GRCs.

### 3. Compliance status with environmental loan covenants

37. The compliance status with environmental and social loan covenants are presented in the following table.

**Table 3- 1: Status of environmental loan covenants**

Sn.	Covenants as Mentioned in Schedule 4	Status of Compliance	Action Required
<b>Implementation Arrangements</b>			
<b>Procurement</b>			
Loan Agreement Schedule 4, para 3	<p>3. The Borrower shall not award any Works contracts which involves environmental impacts until:</p> <p>(a) The Borrower's Ministry of Forests and Environment, or other, responsible authority, has granted the final approval of the IEE;</p> <p>(b) the Borrower has incorporated the relevant provisions from the EMP into the Works contract; and</p> <p>(c) (i) the EA has established a safeguards desk at the CLPIU (Education) and the concerned local level PIU, and (ii) ADB has cleared the appointment of the contractor's proposed environment and safety officer for the Project.</p>	<p>(a) Environmental assessment and review framework (EARF) had been established in accordance with ADB's SPS 2009, to provide guidance for environmental screening, impact assessment, safeguard planning and implementation. The Framework has considered the environmental management plan (EMP) suggested by the initial environmental examination (IEE) prepared for the Project considering six sample schools from two project districts. The government has endorsed the EARF.</p> <p>(b) EMP has been incorporated in the civil works contract and the major items incorporated are presented in section 4.</p> <p>(c) Safeguards desk has been established at DLPIU. The contractors have appointed environment and safety officers only in few sites.</p>	<p>(a) No action required; however, REA checklist will be used for new schools identified for retrofitting.</p> <p>(b) No action required.</p> <p>(c) Establishment of safeguard desk has been completed.</p>
Loan Agreement Schedule 4, para 4	4. The Borrower shall not award any Works contract that involves involuntary resettlement impacts, until the it has prepared and submitted to ADB the final RP based on the Project's detailed design, and obtained ADB's clearance of such RP.	Resettlement Framework (RF) has been prepared supplemented by a due diligence study in accordance with ADB SPS 2009 to provide guidance for social screening and impact assessment. As all 67 schools	Evidence of land ownership certificate (LOC) from most of the schools have been obtained, LOC from



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Sn.	Covenants as Mentioned in Schedule 4		Status of Compliance	Action Required
Implementation Arrangements				
			selected under Recon 1 were to be reconstructed within the existing boundaries of lands owned by respective schools there would not be any involuntary resettlement impact, displacement and loss of income sources to the people as described in DDR. However, some alterations in terms of location shifts within school boundaries are foreseen.	remaining concern schools will be obtained by the end of August 2019.
Environment				
Loan Agreement Schedule 4, para 5	5.	The Borrower shall ensure that 'the preparation, design, construction, implementation, operation and decommissioning of the Project and all Project facilities comply with (a) all applicable laws and regulations of the Borrower relating to environment, health and safety; (b) the Environmental Safeguards; (c) the EARF; and (d) all measures and requirements set forth in the IEE and the EMP and any corrective or preventative actions set forth in Safeguards Monitoring Reports and other relevant Project documents.	All applicable laws and regulations of the Borrower relating to environment, health, and safety are to be applied, however contractor still need to improve the compliance in totality. Environment Safeguards Experts have been mobilized in the DSC team. EARF is being applied for assessment, monitoring and reporting.	Continuation of monitoring and reporting.
Land Acquisition and Involuntary Resettlement				
Loan Agreement Schedule 4, para 6	6.	The Borrower shall ensure that: (a) All land and all rights-of-way required for the Project are made available to them. Works contractor in accordance with the schedule agreed under the related Works contract and all land acquisition and resettlement activities are implemented in compliance with (i) all applicable laws and regulations of the Borrower relating to land acquisition and involuntary resettlement; (ii) the RF; and (iii) all measures and requirements set forth in the RP, and any corrective or preventative actions set forth in the Safeguards Monitoring Report; and (b) No works involving involuntary resettlement impacts are commenced until ADB has cleared the final RP of each package.	No major land acquisition is involved in the construction activities under Recon 1.	Most of the schools have submitted land ownership certificates (Lal Purjas). Obtaining such documents for remaining schools are underway.



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Sn.	Covenants as Mentioned in Schedule 4	Status of Compliance	Action Required
<b>Implementation Arrangements</b>			
Loan Agreement Schedule 4, para 7	<p>7. Without limiting the application of the Involuntary Resettlement Safeguards or the RP, the Borrower shall ensure that no physical or economic displacement takes place in connection with the Project until:</p> <p>(a) Compensation and other entitlements have been provided to affected people in accordance with the RP; and</p> <p>(b) a comprehensive income and livelihood restoration program have been established in accordance with the RP.</p>	No physical or economic displacement has taken place.	No action required as of now.
<b>Indigenous People</b>			
Loan Agreement Schedule 4, para 8	<p>8. The Borrower shall ensure that the Project does not involve any indigenous peoples' impacts within the meaning of the SPS. In the event the Project involves any such 17 Schedule 4 impacts, the Borrower shall take all steps required to ensure that the Project complies with the applicable laws and regulations of the Borrower and with the SPS.</p>	No major impact to the indigenous people is involved in the activities	No action required.
Labor Standards, Health and Safety			
Loan Agreement Schedule 4, para 9	<p>9. The Borrower shall ensure that the core labor standards and the Borrower's applicable laws and regulations are complied with during Project implementation. The Borrower shall include specific provisions in the bidding documents and contracts financed by ~ ADB under the Project requiring that the contractors, among other things: (a) comply with the Borrower's applicable labor law and regulations and incorporate applicable workplace occupational safety norms; (b) do not use child labor; (c) do not discriminate workers in respect of employment and occupation; (d) do not use forced labor; (e) allow freedom of association and effectively recognize the right to collective bargaining; and (f) disseminate, or engage appropriate service providers to disseminate, information on the risks of sexually transmitted diseases, including HIV/AIDS, to the employees of contractors engaged under the Project and to members of the local Communities surrounding the Project area, particularly women. The Borrower shall strictly monitor compliance with the</p>	<p><b>Complied.</b> DLPIU through its Design and Supervision Engineer (DSC) is supervising and monitoring the compliance of the labor, health, and safety law regulations. The project work complies with ADB's requirements and national laws &amp; regulations.</p>	Regular monitoring and supervision including reporting on labour, health, and safety will be required. Full time Safeguards and GESI Monitors at district level have been appointed in 8 Recon1 districts to support the DLPIU in these matters.



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Sn.	Covenants as Mentioned in Schedule 4	Status of Compliance	Action Required
<b>Implementation Arrangements</b>			
	requirements set forth above and provide ADB with regular reports.		
<b>Gender and Development</b>			
Loan Agreement Schedule 4, para 10	10. The Borrower shall ensure that (a) the GAP is implemented in accordance with its terms; (b) the bidding documents and contracts include relevant provisions for contractors to comply with the measures set forth in the GAP; (c) adequate resources are allocated for implementation of the GAP; and (d) progress on implementation of the GAP, including progress toward achieving key gender outcome and output targets, are regularly monitored and reported to ADB.	Partially Complied. Community Awareness Consultant is in place, GESI action plan shall be implemented.	Effective implementation
<b>Human and Financial Resources to Implement Safeguards Requirements</b>			
Loan Agreement Schedule 4, para 11	11. The Borrower shall make available necessary budgetary and human resources to fully implement the EARF, IEE and EMP.	Safeguards experts in DSC have been mobilized; EARF is being implemented for assessment, monitoring and reporting and the EMP provisions incorporated in the BoQ.	Monitoring activity by Safeguards and GESI Monitors will be continued until the end of project.
<b>Safeguards — Related Provisions in Bidding Documents and Works Contracts</b>			
Loan Agreement Schedule 4, para 12	<p>12. "The Borrower shall ensure that all bidding documents and contracts for Works contain provisions that require contractors to:</p> <p>(a) comply with the measures relevant to the contractor set forth in the EARF, IEE and the EMP (to the extent they concern impacts or affected people during construction), and any corrective or preventative actions set forth in a safeguard monitoring reports and other project related documents;</p> <p>(b) make available a budget for all such environmental and social measures;</p> <p>(c) provide the EA with a written notice of any unanticipated environmental risks or impacts that arise during construction, implementation or operation of the Project that were not considered in the EARF, IEE and the EMP;</p>	Complied. All bidding documents are prepared as per ADB Standard Bidding Document (SBD).	No action required.



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Sn.	Covenants as Mentioned in Schedule 4		Status of Compliance	Action Required
Implementation Arrangements				
	(d) adequately record the condition of roads, agricultural land and other infrastructure prior to starting to transport materials and construction; and			
	(e) reinstate pathways, other local infrastructure, and agricultural land to at least their pre-project condition upon the completion of construction			
	<b>Safeguards Monitoring and Reporting</b>			
Loan Agreement Schedule 4, para 13	<b>13 The Borrower shall do the following:</b> (a) submit semi-annual Safeguards Monitoring Reports for environmental ' and involuntary resettlement to ADB and disclose relevant information from such reports to affected persons promptly upon submission; (b) if any unanticipated environmental and/or social risks and impacts arise during construction, implementation or operation of the Project that were not considered in the EARF, IEE and the EMP, promptly inform ADB of the occurrence of such risks or impacts, with detailed description of the event and proposed corrective action plan; and (c) report any actual or potential breach of compliance with the measures and requirements set forth in the EMP promptly after becoming aware of the breach.		Mentoring and reporting will be done as per covenants.	DSC will submit the quarterly and semiannual monitoring reports.
<b>Grievance Redress Mechanism</b>				
Loan Agreement Schedule 4, para 18	18. The Borrower shall ensure that, within 3 months after the Effective Date, the EA enhances its existing GRM to be acceptable to ADB, and forms grievance redress committees at all levels (central, local, and school) to receive and resolve complaints/grievances or act upon reports from stakeholders on misuse of funds and other irregularities, including grievances due to environmental impacts and land acquisition. The committee shall (a) make public of the existence of the GRM; (b) review and address grievances of stakeholders of the Project, in relation to either the Project, any of the service providers, or any person responsible for carrying out any aspect of the Project; and (c) proactively and constructively responding to them.		<b>Partially complied.</b> Grievance redress mechanism (GRM) established. A committee that constitutes the GRC2 in DLPIU to receive and resolve complaints and grievances has been formed. At the school level, formation of GRC1 committee is ongoing.	Effective implementation



#### **4. Compliance Status with the Environmental Management Plan**

38. All the compliance status related to Environmental Management Plan of project implemented under loan 3702 NEP is presented hereunder. IEE has already been disclosed in ADB website. All project related documents and loan agreements are available in <https://www.adb.org/projects/51190-001/main>

39. The EMP provisions mentioned in the BOQs are as follows.

40. The EMP provisions mentioned in the BOQs are as follows.

##### **Construction Period**

1. Environment enhancement (including plantation, of trees, hedges, maintaining greenery, within the school compound) providing and laying of grass and bamboos near retaining wall. (BOQ no. Civil-General-1.2.1)
2. Providing and laying of grass (local dubo with the root carrying and anchoring with 8" bamboo peg and watering for 10 days on soil near retaining wall) (BOQ no. Civil Works-Turfing-24)
3. Insurance of Workers (BOQ no. Civil-General-1.2.1)
4. Barricading the construction area to maintain construction site safe and constructing toilet and camp for labour separately (BOQ no. Civil-General-1.2.2)
5. Providing all types of Personal Protective Equipment (Helmets, Gloves, Boots Safety glasses/face shields, earplugs, earmuffs, first aid tools) to the workers shall be minimum but not limited to 40 sets. Presence of first aid box in the sites. (BOQ no. Civil-General-1.2.4)
6. Provision of Project Information Board and Site safety notice boards. (BOQ no. Civil-General-1.2.3)

##### **Operation Period**

1. Provision of separate toilets for boys, girls, schoolteachers, and staffs. (BOQ no. Sanitary-Sanitary installation-2)
2. Provision of disabled friendly toilets. (BOQ no. Sanitary-Sanitary installation-1)
3. Provision of changing room and WASH (water, sanitation, and hygiene) facilities.
4. Good ventilation planned for classrooms (BOQ no. Civil Works-Doors and Windows-16)
5. Provision of Power Back up System (Solar PV Back up system) (BOQ no. Electrical works-Power Back up System -1)
6. Provision for the installation of incinerators for disposal of sanitary pads and training provided on its operation and maintenance.
7. Provision of dustbin, waste disposal pits etc.
8. Provision to minimize noise pollution during the operation (Tree Plantation, Greenery maintenance).
9. Provision for emergency during disasters (Fire Extinguisher, First Aid Kit, First Aid Bed). (BOQ no. Furniture-Miscellaneous-5.10) (BOQ no. Sanitary-Sanitary installation-22)
10. Provision of Earthing and lighting protection (BOQ no. Electrical works- Earthing and lighting protection-K)
11. Provision of water Filter with UV lamp and filter media (BOQ no. Sanitary-Sanitary installation-20)



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Table 4- 1: Package-wise Contractor/s' representative

Sn.	Name According To Contract	Address	Person to address letter	Contact Email	Telephone
1	CONT_CONTECH_LUMB INI_8_SS_OKGA Contech Lumbini J/V	Okhaldhunga	Ashok P. Malla Manoj Kumar Bhandari	<a href="mailto:Ashokpmalla@gmail.com">Ashokpmalla@gmail.com</a> <a href="mailto:contechlumbiniokhl@gmail.com">contechlumbiniokhl@gmail.com</a>	9851048833 9851026587
2	CONT_CONTECH_LUMB INI_13_SS_SILIU Contech Lumbini J/V	Sindhuli	Ujwal Aryal Ratna Gautam	<a href="mailto:info@khaninirmans.ewa.com">info@khaninirmans.ewa.com</a>	01-4465808 9851075478
3	CONT_SHARMA_KHANI _8_SS_SIWK&2_SS_KA DU Sharma Khani J/V	Kathmandu	Subhash Bastola Jagat Buddha	<a href="mailto:info@khaninirmans.ewa.com">info@khaninirmans.ewa.com</a>	9851049620 9851062277
4	CONT_SHARMA_KHANI _12_SS_RAAP Sharma Khani J/V	Ramechhap	Abindra Basnet Amit Karki	<a href="mailto:abindrabasnet@gmail.com">abindrabasnet@gmail.com</a> <a href="mailto:amitkarki06@gmail.com">amitkarki06@gmail.com</a>	9851121554 9851059539
5	CONT_SHARMA_SWAC H_KHANI_10_SS_KARE &2_SS_BHUR Sharama-Swachhanda- Khani J/V	Kavre & Bhaktapur	Prakash Chandra Khanal, Ratna Gautam	<a href="mailto:info@khaninirmans.ewa.com">info@khaninirmans.ewa.com</a>	01-4465808
6	CONT_SHARMA_SWAC H_KHANI_12_SS_DOHA Sharama-Swachhanda- Khani J/V	Dolakha	Yudhisthir KC, Amit Karki	<a href="mailto:ammitkarki@gmail.com">ammitkarki@gmail.com</a>	9841448101 9851059539
7	CONT_SHARMA_SWAC HA_KHANI_12_SS_RAA P Sharama-Swachhanda- Khani J/V	Ramechhap	Amit Karki Abindra Basnet	<a href="mailto:info@khaninirmans.ewa.com">info@khaninirmans.ewa.com</a>	9851059539 9851121554
8	KHANI-Sharma J/V	Sindhupalchok	Bijay Prakash Mainali, Project Manager	<a href="mailto:bijayprkmainalie@gmail.com">bijayprkmainalie@gmail.com</a>	9851095758



Summary of Environmental Monitoring Activities (for the Reporting Period)

Table 4- 2: Environmental monitoring indicators and status as per EMP/IEE

Environment Impacts	Measures proposed in IEE	Remarks
Beneficial Impacts Improved Infrastructure and Learning Better Environment	<ul style="list-style-type: none"> <li><input type="checkbox"/> Basically, the Government prepared model school typical designs shall be implemented..</li> <li><input type="checkbox"/> School building and other facilities shall be children and disabled friendly.</li> <li><input type="checkbox"/> Toilets shall be separate for boys and girls at a comfortable distance.</li> <li><input type="checkbox"/> Permanent water supply system for drinking and sanitation shall be ensured in each school.</li> <li><input type="checkbox"/> The open spaces in the schools shall be landscaped with gardens and covered with vegetation to improve green cover and aesthetics of the school premises.</li> <li><input type="checkbox"/> A system of operation, cleaning and maintenance of the school buildings and facilities shall be developed in agreement with school management committees and the other responsible stakeholders. Separate and sufficient funds shall be allocated to upkeep the school environment.</li> </ul>	Disaster resilience building has been designed and are under construction with all proposed measures.
Employment and Income Generation Opportunity	Priority will be given to local peoples	Priority has been given to locals wherever there are takers; however, labourers from outside are more.
Increased Business Opportunities	<ul style="list-style-type: none"> <li><input type="checkbox"/> Recommend the contractor to employ local people by giving emphasis on women and vulnerable groups;</li> <li><input type="checkbox"/> Ensure equal wages to male and female;</li> <li><input type="checkbox"/> Promote use of local products and facilities, particularly consumables items.</li> </ul>	Equal wage provided to male and female workers.
Skills Enhancement	<ul style="list-style-type: none"> <li><input type="checkbox"/> Workers will be encouraged to develop skill while working with international contractors through hands on training;</li> <li><input type="checkbox"/> EA may organize certified skill development training for workers in the project districts, increasing opportunity to get employment in semi or skilled job earning higher wage;</li> <li><input type="checkbox"/> Project may prepare construction manual with illustrative steps of performing the work in Nepali language on various construction disciplines.</li> </ul>	Workers are encouraged to develop skills during construction.
Appreciation of Land Value	No measures proposed in IEE.	
Adverse Impacts		
Physical Environmental Issues		
<ul style="list-style-type: none"> <li>Landslide or gully erosion on slopes that may cause risk to the school infrastructure</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Follow National Environmental Guideline for School Improvement and Facility Management for site selection, design, and monitoring activities.</li> <li><input type="checkbox"/> Avoid or maintain adequate distance from landslide or erosion areas.</li> <li><input type="checkbox"/> Adopt right angle of cut on slopes.</li> </ul>	Mitigation measures such as construction of retaining and gabion walls are applied close to Schools in



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Environment Impacts	Measures proposed in IEE	Remarks
	<ul style="list-style-type: none"> <li><input type="checkbox"/> Stabilize slopes by engineering and bioengineering measures including check-dams.</li> <li><input type="checkbox"/> Measures taken to avoid undercutting of hill toes that may cause slides.</li> <li><input type="checkbox"/> Use check dam and channeling of water to avoid erosion and slides.</li> <li><input type="checkbox"/> Do not exert excess load on slopes by disposing spoil.</li> <li><input type="checkbox"/> Do not dump spoil on surrounding agricultural land or open area;</li> <li><input type="checkbox"/> Landscape the school premises and keep as much open area as possible;</li> <li><input type="checkbox"/> Plant trees around the boundary and other possible areas to increase greenery.</li> </ul>	Dolakha District <sup>5</sup> . Whereas, schools in other district are within the premises of old building owned by the school itself.
Permanent and temporary land use changes	<ul style="list-style-type: none"> <li><input type="checkbox"/> Do not dump spoil on surrounding agricultural land or open area;</li> <li><input type="checkbox"/> Landscape the school premises and keep as much open area as possible;</li> <li><input type="checkbox"/> Plant trees around the boundary and other possible areas to increase greenery.</li> </ul>	No significant change in land use identified.
Impact on Soil and Top Soil	<ul style="list-style-type: none"> <li><input type="checkbox"/> The topsoil from the areas of cutting and areas to be permanently covered will be stripped to a specified depth and stored in stockpile storage area located away from water course and drainage areas. The stockpile will be designed such that the slope does not exceed 1:2 (vertical to horizontal), and the height of the pile is to be restricted to 2m. Stockpiles will not be surcharged or otherwise loaded and multiple handling will be kept to a minimum to ensure that no compaction occurs. The stockpiles will be covered with gunny bags or tarpaulin. Such stockpiled topsoil will be returned to cover the disturbed area;</li> <li><input type="checkbox"/> Leakage of fuel, lubricants and chemicals on soil will be avoided by storing them on impervious surface with proper peripheral drainage;</li> <li><input type="checkbox"/> Grit chamber and oil sump will be provided in the chemical storage area to collect and remove waste material and oil before discharging water into natural drainages. The existing retention pond could also be utilized for sediment control;</li> <li><input type="checkbox"/> Spoil generated during construction will be used in reclaiming low lying areas.</li> </ul>	No impact on soil and topsoil, as most of the schools are under construction within the land owned by schools. Spoil generated during construction are reused and some are disposed safely.
Impact due to solid waste and Stockpiling of construction materials	<ul style="list-style-type: none"> <li><input type="checkbox"/> Haphazard disposal of construction materials will be strictly prohibited;</li> <li><input type="checkbox"/> Reuse the spoil and other materials. Maintain proper material storage system and ensure to control littering of construction materials outside the designated places;</li> <li><input type="checkbox"/> Stockpiling site of construction materials will be designated at demarcated place such that there will be minimum disturbances for day to day school activities;</li> <li><input type="checkbox"/> Provide solid waste container inside the construction site;</li> <li><input type="checkbox"/> Give health &amp; Hygienic training to workers;</li> <li><input type="checkbox"/> Separate provision for collection and disposal of hazardous waste, if any, as prescribed by government rule and regulations.</li> </ul>	Construction materials are stockpiled safely without creating disturbance to local inhabitants.
Drainage and Downstream Impact	<ul style="list-style-type: none"> <li><input type="checkbox"/> Provide adequate drainage system to have minimum interference with natural drainage pattern within and around the school compound area;</li> <li><input type="checkbox"/> Avoid blocking or diverting water away from natural watercourse;</li> <li><input type="checkbox"/> Wastewater will not be allowed to be discharged in the open area;</li> <li><input type="checkbox"/> Drainage shall be discharged safely without causing soil erosion and landslide.</li> </ul>	No significant impact upon drainage and downstream identified yet.

soils of Dolakha such as Bhim Ma Vi, Mahendrodaya Ma Vi, Kuttidanda Ma Vi, Mahendra Ma Vi have poor condition of slope stability. Problem foreseen is the possible landslide and slide especially during rainy season. Retaining wall and breast wall has been provisioned to enhance the slope stability.



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Environment Impacts	Measures proposed in IEE	Remarks
Impact on air quality	<ul style="list-style-type: none"> <li><input type="checkbox"/> Good engineering practices will be adopted along with use of good quality fuel and regular maintenance of equipment and vehicles;</li> <li><input type="checkbox"/> Water sprinklers will be used to suppress dust particles in construction area and at dust generating equipment;</li> <li><input type="checkbox"/> Material transportation and dust generating construction activities will be scheduled to avoid impacts to communities living nearby the area;</li> <li><input type="checkbox"/> Construction material will be covered during transportation or at storage sites;</li> <li><input type="checkbox"/> Workers will be provided with face mask and goggles to protect them while working in high dust areas.</li> </ul>	Very low impact on air quality.
Impact on Noise Level	<ul style="list-style-type: none"> <li><input type="checkbox"/> Cushions and good silencers or cover will be provided to suppress noise from equipment and vehicles;</li> <li><input type="checkbox"/> Equipment and vehicles will be regularly maintained;</li> <li><input type="checkbox"/> Construction equipment will be kept at considerable distance from settlements;</li> <li><input type="checkbox"/> Workers will be provided with ear-muffler and earplugs while working in high noise area;</li> <li><input type="checkbox"/> Schedule the noise generating work only during daytime and duration and frequency of operation of construction equipment will be minimized.</li> </ul>	Construction works are mostly carried out during daytime only where no one are allowed entry freely.
Impact on water quality	<ul style="list-style-type: none"> <li><input type="checkbox"/> Seepage and spillage of chemicals, oil and lubricants will be avoided by storing them on impervious surface with proper drainage;</li> <li><input type="checkbox"/> Water conserving technologies will be used during construction;</li> <li><input type="checkbox"/> Washing of project vehicles in water bodies will be restricted;</li> <li><input type="checkbox"/> Construction materials shall be stockpiled on impervious surface with surrounding drainage away from natural drainage to avoid them reaching in water bodies;</li> <li><input type="checkbox"/> Sanitation facilities (pit toilets, or toilets with soak pits and septic tanks will be provided in labor and construction camps and work areas).</li> </ul>	No such impact identified.
Handling of Construction Material and Safety of Workers	<ul style="list-style-type: none"> <li><input type="checkbox"/> All workers employed on mixing cement, concrete etc., will be provided with protective footwear and protective goggles. Workers, who are engaged in welding works, would be provided with welder's protective eye-shields;</li> <li><input type="checkbox"/> Workers engaged in stone breaking activities will be provided with protective goggles and clothing;</li> <li><input type="checkbox"/> The use of any toxic chemical will be strictly in accordance with the manufacturer's instructions;</li> <li><input type="checkbox"/> A register of all toxic chemicals delivered to the site will be kept and maintained up to date by the Contractor. The register will include the trade name, physical properties and characteristics, chemical ingredients, health and safety hazard information, safe handling and storage procedures, and emergency and first aid procedures for the product.</li> </ul>	Contractors have the intentions to apply safety measures; however safety to be improved significantly. Contractors are instructed to improve maintaining barricade while working at height.



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Environment Impacts	Measures proposed in IEE	Remarks
Closure of construction camp	<ul style="list-style-type: none"> <li>Contractor will prepare site restoration plans for approval by the Engineer. The plan will be implemented by the contractor prior to demobilization;</li> <li>On completion of the works, all temporary structures will be cleared away, all rubbish burnt, excreta or other disposal pits or trenches filled in and effectively sealed off and the site left clean and tidy and at the contractor's expense to the satisfaction of the Engineer and as per the provisions of the contract;</li> <li>Residual topsoil will be distributed on spoil disposal area, barren areas as identified by the Engineer in a layer of thickness of 75mm – 150mm with proper turf and vegetation.</li> </ul>	Construction ongoing. Contractor will rehabilitate all the campsite after the completion of construction work.
Pressure on Existing Public Roads	<ul style="list-style-type: none"> <li>Install various appropriate traffic sign boards at public places wherever necessary;</li> <li>Avoid office hour to transport construction materials through heavy trucks/vehicles;</li> <li>Entry of heavy vehicles shall be restricted as far as possible during the peak office/school hours.</li> </ul>	Most of the schools are located in rural areas where traffic volume is very less. Hence, no pressure on public road traffic.
Impact due to generation of solid waste	<ul style="list-style-type: none"> <li>Waste generated from the school will be segregated and kept in different containers;</li> <li>Provide separate solid waste containers, for organic, inorganic reusable/recyclable and hazardous solid wastes.</li> </ul>	Solid waste generated from the camps disposed safely.
Issue of E-Waste, Heavy Metals, Hazardous Waste management	<ul style="list-style-type: none"> <li>Properly store and manage grease, paints and other construction materials;</li> <li>Install separate container for hazardous waste inside the school compound;</li> <li>Convert it to non-hazardous waste after treatment and then only send it to the disposal site designated by local authority;</li> <li>Give health, sanitation &amp; hygiene training to students and workers;</li> <li>Promotion of recycling and reusing of recyclable and reusable material.</li> </ul>	No significant issue of hazardous waste is identified due to construction.
Drainage Management and Impact on Water Quality	<ul style="list-style-type: none"> <li>The rainwater could be managed for recharging groundwater;</li> <li>Excess water will be drained out through the drainage system;</li> <li>Keep school premises clean and periodically spray insecticide for controlling vector disease.</li> </ul>	No impact upon natural drainages due to construction.
Impact on Air Quality and Noise Level due to Vehicular Movement	<ul style="list-style-type: none"> <li>Use silencers to minimize sound of vehicles/machineries;</li> <li>Pre-informing the neighbors in case of event producing disturbing sound;</li> <li>Cover all the open space with vegetation;</li> <li>Do not allow vehicles (older than 20 years) to operate;</li> <li>Restrict use of horn near school area.</li> </ul>	The movement of construction of vehicle have less impact on air and noise and hence no significance.
Water Demand/Supply	<ul style="list-style-type: none"> <li>Project shall fulfill the water demand with provision of</li> <li>Sump well &amp; pump if water has to be lifted from low lying rivers and springs;</li> <li>Water storage tank;</li> <li>Supply of water from other available sources;</li> <li>Practice rainwater harvesting.</li> </ul>	Contractor has supplied water in tankers wherever water is not available. However, in rural area; enough water is available from local springs.



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Environment Impacts	Measures proposed in IEE	Remarks
Disaster Management (Fire, Earthquake)	<ul style="list-style-type: none"> <li><input type="checkbox"/> Design shall include factor for ensuring seismic resistant school building following the National Building Code (NBC);</li> <li><input type="checkbox"/> Ensure provision of emergency exist;</li> <li><input type="checkbox"/> Install fire alarm system, firefighting system and adopt other necessary measures on fire safety;</li> <li><input type="checkbox"/> Train student leaders and volunteers on tackling safety measures during emergency;</li> <li><input type="checkbox"/> Conduct regular safety drills in the school;</li> <li><input type="checkbox"/> Paste posters and telephone numbers of staff to be contacted during emergency;</li> <li><input type="checkbox"/> Keep first aid box ready in the school.</li> </ul>	All these measures are included in design and will be implemented accordingly.
Solar Power	<ul style="list-style-type: none"> <li><input type="checkbox"/> Employees/students/teachers will be encouraged to use water and electricity in an efficient way;</li> <li><input type="checkbox"/> Use led bulbs instead of CFL;</li> <li><input type="checkbox"/> Establish a mechanism for disposal of old batteries and acidic water.</li> </ul>	Included in design and will be implemented accordingly.
<b>Biological Issues</b>		
loss of vegetation and impact on wildlife/bird	<ul style="list-style-type: none"> <li><input type="checkbox"/> Plant trees at the periphery and garden of the school in order to increase green cover in the area;</li> <li><input type="checkbox"/> Restrict the workers in killing or harassing of birds and wildlife;</li> <li><input type="checkbox"/> Securely fence the school area; and</li> <li><input type="checkbox"/> Regularly mow the grass.</li> </ul>	No significant loss of trees and vegetation. Replantation items are incorporated in BOQ and will be implemented accordingly.
Impact on wildlife due to increased human activities	<ul style="list-style-type: none"> <li><input type="checkbox"/> Community and authorities will remain vigilant and alert on illegal felling of timber and killing of wildlife.</li> </ul>	No impact on wildlife are identified
<b>Socio-economic Issues</b>		
Land Acquisition, Compensation and Reinstatement of Community Structures	<ul style="list-style-type: none"> <li><input type="checkbox"/> Any land acquired voluntarily shall follow the established practice as guided by resettlement framework;</li> <li><input type="checkbox"/> Contractor shall sign a MOU with landowner for depositing construction material or temporary deposition of spoil. The MOU shall be reported to the site engineer and include in monthly report.</li> </ul>	No significant land acquisition issues are identified during construction. However, some schools are under construction acquiring new land which is presented in the following section/Table.
Occupational Health and Safety	<ul style="list-style-type: none"> <li><input type="checkbox"/> The contractor will arrange proper camping facility with rooms having good ventilation, natural light, fan and mosquito net. Contractor will give priority to employ local workers, particularly poor and vulnerable people, which will reduce the need of establishing labour camp. Clean drinking water supply, toilets and solid waste management facilities will be made available to the workers in their camps;</li> <li><input type="checkbox"/> Contractor will restrict use of firewood for cooking and heating and will supply kerosene or gas in the mess of workers;</li> <li><input type="checkbox"/> Contractor will supply food items to the camps giving priority to local products;</li> <li><input type="checkbox"/> All workers will be insured;</li> </ul>	Labourers are provided with safety gears. First aid boxes are in place. However, contractors are instructed to improve OHS status in the construction site.



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Environment Impacts	Measures proposed in IEE	Remarks
	<p><input type="checkbox"/> Contractor will prepare and implement a safety plan approved by the Engineer including provision for emergency preparedness and response and fire safety;</p> <p><input type="checkbox"/> Safety gears will be supplied by the contractor to all workers in sufficient number depending upon the nature of work, and make it mandatory to use them;</p> <p><input type="checkbox"/> Firefighting facility and first aid box will be kept in camps and work sites with provision of a health assistant standby at call;</p> <p><input type="checkbox"/> Arrangement will be made by the contractor with local hospital or health post for services in case of emergency;</p> <p><input type="checkbox"/> Adequate security arrangement with fencing and lighting will be arranged around camp sites and material storage areas to ensure that unauthorized people and animals do not enter in the area and get exposed to the potential hazards of construction activities.</p>	
Socially undesirable activities	<p><input type="checkbox"/> Restrict movement of workers out of camp after certain hours in the night;</p> <p><input type="checkbox"/> Restrict use of alcohol and gambling in the camp;</p> <p><input type="checkbox"/> Supply water, daily consumable items, communication facility in the camp so as not to create additional pressure on the local services;</p> <p><input type="checkbox"/> Orient workers to show respect to local tradition and culture;</p> <p><input type="checkbox"/> Prepare a code of conduct for all project staff, orient them and monitor that these are effectively followed by all;</p> <p><input type="checkbox"/> Assign a public relation officer by the project to keep close and regular consultation and coordination with local communities;</p> <p><input type="checkbox"/> Regular follow up and monitoring on workers behaviour and take appropriate measure on defaulters.</p>	No socially undesirable activities are identified during the construction.
Properties of Archaeological Importance	<p><input type="checkbox"/> ADB's chance find procedure shall be applied;</p> <p><input type="checkbox"/> The contractor will take reasonable precaution to prevent his worker or any other staff from removing and damaging any such article or thing and will, immediately upon discovery thereof and before removal, acquaint the Engineer of such discovery and carry out the Engineer's instructions for dealing with the same, awaiting which the work shall be stopped 100 m all directions from the site of discovery;</p> <p><input type="checkbox"/> The Engineer will seek direction from the Archaeological Department before instructing the contractor to recommence work on the site.</p>	No significant issues identified related archaeology, however, dispute regarding shifting of Rajyalaxmi SS of Okhaldhunga; where locals (Rai community) oppose construction of school on preoccupied area due to the land adjoining to school comprising religious significance to them. Some branches of sacred tree having religious significance might have to be removed or trimmed though not uprooted entirely. In this regard, DSC experts have conducted assessment and the details can be find in the report send to ADB.



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Environment Impacts	Measures proposed in IEE	Remarks
Gender and Child Labour	<input type="checkbox"/> Provide equal wage to male and female for similar nature of work; <input type="checkbox"/> Restrict use of child below 16 years of age in labor work (as per ILO standard); <input type="checkbox"/> Provide female friendly construction environment with separate toilet for women, and if possible, childcare facility for women with young babies, and suitable work categorization for women.	Equal wage provided to male and female for similar work. No other issues related to gender and child labour.
Health and Sanitation	<input type="checkbox"/> Provide sufficient numbers of and separate toilets in camps and work sites for both male and female; <input type="checkbox"/> Dispose construction debris at designated spoil disposal site; <input type="checkbox"/> Garbage collection system will be initiated by establishing bins at places in the construction area.	Health and sanitation condition are maintained however, needs improvement in some of the under-construction school.
Infection of STDs and Other Communicable Diseases	<input type="checkbox"/> Restrict alcohol, gambling and socially undesirable activities by workers living in labor camps, and instruct them not to indulge in such activities if they are living outside of labour camp; <input type="checkbox"/> Arrange awareness program to the workers and local communities on HIV/AIDS and STDs; <input type="checkbox"/> Erect posters on safety practices to prevent from STDs; <input type="checkbox"/> Distribute free condoms to workers as a part of educating them.	No such issues identified.
Impact on Social Facilities	<input type="checkbox"/> Regularly organize interaction programs between local people and other relevant personnel. <input type="checkbox"/> Coordinate with local social service providers and concerned government institutions to meet up the local demand of physical as well as social infrastructures.	Relocation of electric poles are carried out in one of the sites. No impact on other social facilities and other sites
Traffic Congestion and Management	<input type="checkbox"/> Work in co-ordination with the traffic police in planning and management of the traffic	Road Traffic is not significant in the construction areas.
Congestion and Overcrowding	<input type="checkbox"/> Manage the incoming and outgoing of vehicle according to the traffic rules	Road Traffic is not significant in the construction areas..

Moreover, no significant climate change issues due to construction of school are identified.



## **5. Approach and methodology for environmental monitoring of the project**

41. Within the scope of the Design and Supervision Consultant (DSC) the construction supervision of all construction including reporting to client is an integral part. The DSC team comprises of International & National Experts including Environment Safeguard Expert, Social Safeguards Expert, GESI Expert, Site Engineer (SE) for each under construction school, Resident Engineer (RE) and Safeguards and GESI Monitors designated for each project districts. Routine monitoring and reporting of all activities including the safeguard issues of all the school projects implemented under loan 3702 NEP is also one of the task of the DSC. Safeguards monitoring and reporting requirements has been carried as per EARF established for the DRSP.

42. Safeguards experts have ensure establishment of environmental safeguards mechanism in the project to monitor environmental safeguards of the subproject project works as guided by EMP. The experts will further ensure overall compliance with the government rules and regulations regarding environmental clearances. The monitoring activity detects environmental changes and estimated inherent variation within the environment, establishes long-term trends in the natural system, and derives conclusions by making comparison against a standard or a target. DSC will submit monthly monitoring and implementation reports to the DLPIU, who will take follow-up actions, if necessary. DLPIU will submit the quarterly monitoring and implementation reports to the CLPIU. The CLPIU will submit semi-annual monitoring reports to ADB. Project budgets will reflect the costs of monitoring and reporting requirements. Monitoring reports will be posted in a location accessible to the public.

## **6. Monitoring of environmental impacts on project surroundings**

43. No impacts upon air, water quality, and noise has been identified with the construction activity of schools under RECON1. The proposed schools' locations are situated in rural area where the population density is not as high as in the urban context of Nepal. Moreover, Environment Safeguards Compliance Matrix has also been prepared to present the overall environmental performance identifying each parameters as per Environment Management Plan presented in the IEE report. A specific score has been assigned to each indicator to present the performance on environment due to construction. The Ranking Score is; Poor= below 55; Average= 56-70, Fair 71-80; Good 81 -90, Excellent= above 90. The compliance matrix is presented in the Appendix 4.

## **7. Grievance Redress Mechanism**

44. There is a three tiers mechanism to address grievances related to affected persons (APs) in the implementation of the project. First level GRC1 has been formed at the school level comprising of 5 members. GRC1 will be in place in all 67 schools under RECON1 by the end of July 2019. The GRC1 is to be chaired by SMC chair, and DLPIU/DSC site in charge, head teacher, representative of parent's teachers committee and one representative from surrounding community will be the members of the committee. The school head teacher will work as the member secretary of the committee. Similarly, second-level GRC2 has been formed at DLPIU comprising of 3 members to hear the unresolved grievances forwarded by the school level GRC1. The establishment of GRC at DLPIU (GRC2) is in place. DLPIU project manager will chair the GRC2, and DLPIU safeguard focal person, DSC safeguard monitor will be the committee members. The DLPIU safeguard focal person will work as the member secretary of the committee. Similarly, third-level GRC will be formed at CLPIU comprising 3 members to hear the unresolved grievances forwarded by the DLPIU level GRC2. The GRC3 will be chaired by CLPIU project director, and CLPIU safeguard focal person, DSC safeguard expert will be the committee members. The CLPIU safeguard focal person will work as member secretary of the committee.



## 8. Complaints received during the reporting period

45. Till date no grievances related to the environmental and social issues have been received from the sites. Most of the construction works have been carried out within the pre-existing school land owned by the school itself and within the confined location. The construction activities do not have any significant disturbance on the environment and to the local people.

## 9. Summary of key issues and remedial actions

46. The following table present summary of key issues and its remedial actions required.

**Table 9- 1: Key issues and remedial actions.**

Sn.	Key Issues	Remedial Actions	Remarks
1.	Safety during construction	Regular toolbox talks, proper PPEs to all labour workers	Daily-the contractor will be responsible for providing the PPEs to the workers as and when required. Safety status is to be improved by the contractors.
2.	Proper barricade along the construction sites and each story height before construction of boundary walls and windows.	Provide safe barricading, installation of safety signboards, instruction boards, emergency numbers, and safety plans/procedures in place.	Contractors were instructed to install green and safety signboards for soft barricade as well as hard barricade for the unattended manholes and works at height.



## Appendix 1: Photographs



Fig 1: Barricading at Bhim Vidhya shram, Sindupalchowk



Fig 2: Sign of Danger placed at Kageshori Ma.Vi, Sindupalchowk

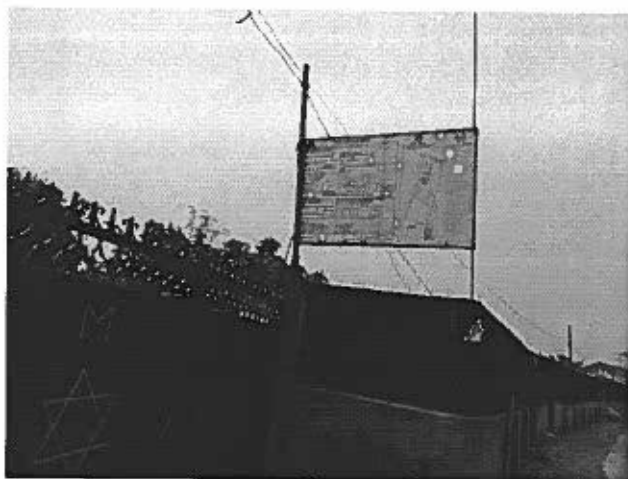


Figure 3: Information Board in Shree-Kuleshwor Secondary School, Kathmandu



Figure 4: Safety Board in Shree-Kuleshwor Secondary School, Kathmandu



Figure 5: First Aid Box in Shree-Kavresthali Secondary School



Figure 6: Labours kitchen in Shree-Kavresthali secondary School





Fig 7: Labor in work place with PPEs at Janakalyan Ma.Vi, Sindhupalchowk

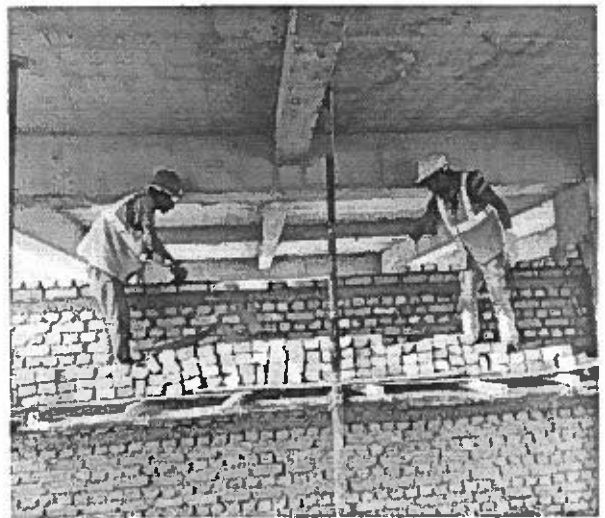


Fig 8: Workers with Proper PPEs at Shree-Panchakantya Secondary school, Bhaktapur



Fig 9: Barricading with safety boards at Shree-Panchakanya secondary School, Bhaktapur



Fig 10: Available of safety sign board, HIV board and emergency Number at Shree-Panchakanya secondary School, Bhaktapur



Fig 11: Worker with harness at Shree Panchakanya Secondary school, Bhaktapur



Fig12: Barricade at Shree Devi Secondary School, Bhaktapur



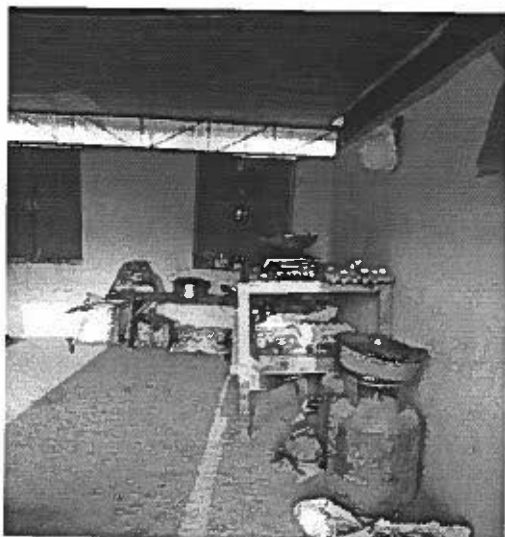


Fig 13: Labour camp with good sanitation at Sunkoshi Secondary School, Okhaldhunga



Fig 14: Barricading at site with bamboo and zinc sheet at Jalpa Secondary School, Okhaldhunga



Fig 15: First aid box in Katunje SS, Okhaldhunga



Fig 16: Proper barricade with safety signs at Dapcha Mavi, Kavrepalanchowk

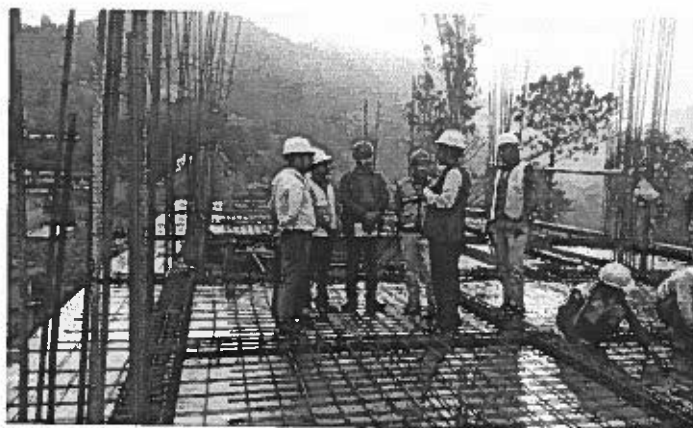


Fig17: ADB Environment Monitor Mr. Resham Baniya with SMC chairperson, Principal, RE, site engineers and safeguard monitor at Shree Jorpati Ma Vi



Fig18: Site office at Shree-Devi Secondary School, Bhaktapur



**Appendix 2: Minutes of the Safeguards Desk and GRC  
formation  
(Sample only)**



## Minutes of GRC2 formation in Kavrepalanchok



Project Name:	L3702 & G0601/0602 _ DRSP – Disaster Resilience School Project	
Investor Company:	ADB	
Purpose of the Meeting:	Grievance Redress Committee (GRC-2) formation	
Place	Dhulikhel, DLPIU office	Date / Time 2078/102/29

This meeting is chaired by Dwarika Prasad Pokharel for the formation of Second Level Grievance Redress Committee (GRC 2) at Dhulikhel, Kavre DLPIU in presence of following participants and the meeting is concluded with agreed actions mentioned herewith.

## Meeting Participants:

Sn.	Organization/Company	Name	Position	Signatures	Telephone	Mail
1.	DLPIU	Dwarika Pd. Pokharel	DLPIU Unit Chief	<i>[Signature]</i>	9851-82278	dwarikapokharel64@gmail.com
2.	DLPIU	Sorita Shrestha	DLPIU Engineer	<i>[Signature]</i>	984159826	sorita0808@gmail.com
3.	DSC	Vishu Ram Pokharel	DSC Resident Engineer	<i>[Signature]</i>	985112266	vishuram@yahoo.com
4.	DLPIU	Yadu Bikram Thapa	DLPIU Safe guard focal person	<i>[Signature]</i>	984421684	yadu2038@gmail.com
5.	DSC	Saroj Koirala	DSC Environmental Safeguard Monitor	<i>[Signature]</i>	9841892855	envsaroj@gmail.com
6.	DSC	Sunita Rai	Admin / DSC	<i>[Signature]</i>	9861963545	sunitarai429@gmail.com

## Agreed actions:

## 1. Second Level GRC

Second-level GRC is formed at the DLPIU comprising 3 members. The DLPIU project manager-Chair of the committee and DLPIU safeguard focal person will work as member secretary of the committee. The committee formed at DLPIU level (GRC 2) members detail is as follows.





Sn	Name	Position	Signatures	Telephone	Mail
1	Durgika Pd. Pokharel	DLPIU project manager	D. Pokharel	9891-82278	durgikapokharel@gmail.com
2	Yadu Bikram Thapa	DLPIU safeguard focal person	[Signature]	9844216856	Yadu2038@gmail.com
3	Saroj Koirala	DSC Environmental safeguard monitor	[Signature]	9641892855	onsaroj@gmail.com

## 2. Responsibilities

It is agreed that the committee will be responsible for the following:

1. The committee will be responsible to hear the unresolved grievances forwarded by the school level GRC
2. It is agreed to resolve complaints/grievances/issues forwarded by GRC I within 15 days from the date of registration at DLPIU.
3. It is decided to maintain a grievance registry book containing following information:
  - (i) Name of the person;
  - (ii) Date complaint was received;
  - (iii) Nature of complaint;
  - (iv) location;
  - (v) Means of communication;
  - (vi) Status of the complaint (in process, resolved, forwarded to next level) for anyone who wishes to entry grievance and will make available in the office of the school.

[Signature] D. Pokharel [Signature]



## Minutes of Safeguards Desk formation in Kavrepalanchok



UMAR MUNSHI ASSOCIATES

CONSULTANTS

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UMAR MUNSHI ASSOCIATES



4.						
5.						

## 2. Responsibilities

- The desk will organize routine meeting at central and local levels;
- The desk will review safeguard compliance performance;
- Any emerging issues during the construction will be reviewed and agreed for corrective actions;
- The desk will further coordinate with technical team/contractors to implement them.

*Signature* D. Pokharel *Signature*



### **Appendix 3: Filled Environment Health and Safety Checklist**

(Filled Sample)



**Disaster Resilience Schools Project (DRSP)**  
**Umar Munshi in associate with sub consultants ERM (P) Ltd., PACE (P.) Ltd., &**  
**Progressive Research and Consultancy Service**  
**Checklist for Environmental, GESI, and Social Safeguard Monitoring**

**Name of Contractor/Contract ID: Sharma Swachchhanda Khani –**  
**JV,DRSP/MoE/CLPIU/075/076/Kavre**

**Name of School: Shree Jorpati SS (240660016)** **Location: Panchkhal-6,**  
**Tinipale**

**Initial Contract Amount (NRs.): 5,06,88,743.10**

**EMP provision in BOQ (NRs.): 15,19,819.20**

**Start Date: 12 June 2018** **Intended Completion Date: 17 Jan, 2019**

**Checklist for the monitoring of Environmental, GESI, and Social Safeguards in DRSP**  
**(Year 2019)**

Sn.	Issue/Indicator	Acceptability (✓ or X)	Remarks
	<b>For school construction period</b>		
1.	Contractor's environmental assurance officer (CAO) appointed (in each project district (CAO) to DLPIU and CLPIU).	X	Not yet.
2.	Implementation plan proposed by the Contractor.	X	
3.	Environment & Social safeguard screening report for each school site is in place.	X	The school has already been selected and detail design has been completed
4.	Due diligence report (DDR) for each school selected for reconstruction is in place which shall include land owner's certificate of school.	✓	
5.	Environment Management Plans (EMP) to be implemented that need to be followed by the contractor and is incorporated in the Bidding document.	✓	
6.	Condition of slope of stability around school area is good.	✓	No need of Retaining wall
7.	Landslide and gully erosion existed close to the school area that may cause risk to the school infrastructure.	X	
8.	Provision of bioengineering for slope Protection	✓	
9.	Impact upon top soil/cultivated land.	X	NO impact
10.	Spoil management/tipping sites	✓	Not so good



## Semi-annual Social and Environmental Compliance Monitoring Report January-June 2017

Sn.	Issue/Indicator	Acceptability (√ or X)	Remarks
11.	Provision of drainage and its proper management (Follow 8.6 Drainage; pg; 61 of EARF)	√	
12.	Loss of land or acquisition of new land beyond existing school area	X	No new land Acquisition.
13.	Change in land use/ landscape	X	No change in land Use pattern.
14.	Dust/air pollution due to construction activity/ movement of construction vehicle	X	Minimum pollution
15.	Dust/air pollution due to operation of stone crushing/quarries and borrow pits	X	
16.	Dust/air pollution due to vehicle passing by school (Traffic sign shall be kept mentioning —School Zone, Speed control measures like bumps shall be kept. Plantation of trees around periphery of school will act as dust and noise barrier)	X	
17.	Air quality monitored	√	Not bad.
18.	Pollution or impact upon water bodies due to construction	X	No water body near construction site.
19.	Water quality monitored	√	
20.	Noise during construction	√	No adverse impact to Environment Low noise pollution during the time of Concreting and Iron cutting.
21.	Employment opportunity/number of employ	√	17 total worker( no local)
22.	Occupational health and safety of construction workers		
	• Insurance of workers	√	Group insurance
	• Safety construction practice	√	Fair ( improving)
	• Safety barricade or fencing, Sign board on safety awareness, caution tape around under construction area.	√	Partially present
	• Emergency safety measures of contractor in place	√	Fair
	• No child labour	√	No child labour
	• First aid box in place close to construction site	√	yes
	• Use of PPEs by labour	√	Not satisfactory, improving than before
	• Fatal accident during construction	X	No till date
23.	Labour camp		
	• Labour camp in good condition with proper ventilation, lighting	√	Problem of proper bedding
	• Health, hygiene and sanitation	√	Poor Sanitation.
	• Solid waste management form toilets/kitchen	√	Buried and burning



## Semi-annual Social and Environmental Compliance Monitoring Report January-June 2017

Sn.	Issue/Indicator	Acceptability (✓ or X)	Remarks
	• Separate male and female toilets, clean toilets with adequate supply of water; maintain hygiene	X	No female worker
	• Communicable and vector borne disease among construction workers, mosquito net at camps	X	
	• Use alcohol and other forms of intoxication by labourers; gambling, quarrel with locals, disrespect local culture and religion, and may promote socially undesirable activities	✓	Consume at night but till now no impact to society
24.	Community health and safety issues	X	
25.	Any physical as well as economic displacement due to construction of school	X	
26.	Deforestation and use of wood in construction	X	Using LP gas
27.	Management of chemical waste, fuel, oil and lubricants; Spillage of chemical.	✓	Not in use
28.	Provision for mitigating climate change impacts	X	
29.	Establishment of GRM (first level GRC-comprising 5 members)	✓	GRC (1) recently formed at school level.
30.	Grievances documented and hearing	X	Not till now
31.	Stagnant water/ponds situated close to school	X	NO
32.	Relocation and impact upon religious /physical /community structure /historical /archaeological sites	X	
33.	Skill development trainings provided to workers by contractor	X	
34.	Orientation for awareness raising training to teachers, students, SMC and local stakeholders on environmental safeguards and disaster management	X	
35.	Erect awareness signboards for public informing community and workers on critical issues like STDs and HIV/AIDS	X	
36.	Encroachment in forest or any conservation area	X	
37.	Clearing of trees	✓	3 pine trees removed from the site.
38.	Permits of tree cutting required and received	✓	Permission by SMC
39.	Compensation of cut trees/tree plantation	X	Not till now
40.	Permits required for other purposes	X	
41.	Public awareness campaign and information disclosure during construction	✓	



Semi-annual Social and Environmental Compliance Monitoring Report January-June 2017

Sn.	Issue/Indicator	Acceptability (✓ or X)	Remarks
42.	Impact upon wild life and birds	X	
43.	Illegal fishing and hunting of wild fauna and flora; and its trade	X	
44.	Production and trade of illegal materials	X	
45.	Cleaning site after construction and disposing waste properly	✓	
46.	Ineffective mitigation measures found during implementation	X	
47.	Unexpected adverse impacts	X	



**Disaster Resilience Schools Project (DRSP)**  
**Umar Munshi in associate with sub consultants ERM (P) Ltd., PACE (P.) Ltd., &**  
**Progressive Research and Consultancy Service**  
**Checklist for Environmental, GESI, and Social Safeguard Monitoring**

**Name of Contractor/Contract ID:** Contech-Lumbini JV/ DRSP/CLPIU/074/75-Okhaldhunga\_01

**Name of School:** Gramodaya Yu.Si. SS (GRYUSI\_03) **Location:** Sinkichaur

**Initial Contract Amount (NRs.):** 91281453.26(without vat) **EMP**

**provision in BOQ (NRs.):** Start Date: February, 2019 **Intended**

**Completion Date:** August, 2019

**Checklist for the monitoring of Environmental, GESI, and Social Safeguards in DRSP (Year 2019)**

Sn.	Issue/Indicator	Acceptability (✓ or X)	Remarks
<b>For school construction period</b>			
1.	Contractor's environmental assurance officer (CAO) appointed (in each project district (CAO) to DLPIU and CLPIU).	X	
2.	Implementation plan proposed by the Contractor.	X	
3.	Environment & Social safeguard screening report for each school site is in place.	X	
4.	Due diligence report (DDR) for each school selected for reconstruction is in place which shall include land owner's certificate of school.		
5.	Environment Management Plans (EMP) to be implemented that need to be followed by the contractor and is incorporated in the Bidding document.	✓	
6.	Condition of slope of stability around school area is good.	✓	Recently stable there might be requirement of retaining wall (Study of it is going on by S.E)
7.	Landslide and gully erosion existed close to the school area that may cause risk to the school infrastructure.	X	
8.	Provision of bioengineering for slope protection	X	
9.	Impact upon top soil/cultivated land.	✓	Filled soil is near the agricultural land and road
10.	Spoil management/tipping sites	✓	Managed nearby land with permission



## Semi-annual Social and Environmental Compliance Monitoring Report January-June 2017

Sn.	Issue/Indicator	Acceptability (✓ or X)	Remarks
11.	Provision of drainage and its proper management (Follow 8.6 Drainage; pg; 61 of EARF)	X	
12.	Loss of land or acquisition of new land beyond existing school area	X	No land acquisition
13.	Change in land use/ landscape	X	
14.	Dust/air pollution due to construction activity/ movement of construction vehicle	X	No dust seen due to construction
15.	Dust/air pollution due to operation of stone crushing/quarries and borrow pits	X	
16.	Dust/air pollution due to vehicle passing by school (Traffic sign shall be kept mentioning —School Zone, Speed control measures like bumps shall be kept. Plantation of trees around periphery of school will act as dust and noise barrier)	X	
17.	Air quality monitored	✓	Good condition
18.	Pollution or impact upon water bodies due to construction	X	
19.	Water quality monitored	✓	No water bodies near
20.	Noise during construction	✓	No adverse impact to Environment
21.	Employment opportunity/number of employ	✓	26 total (no female worker)
22.	Occupational health and safety of construction workers		
	• Insurance of workers	X	Nom insurance
	• Safety construction practice	X	Fair
	• Safety barricade or fencing, Sign board on safety awareness, caution tape around under construction area.	X	Only caution tape
	• Emergency safety measures of contractor in place	X	Fair
	• No child labour	✓	Already instructed to avoid child labour
	• First aid box in place close to construction site	X	Not present at site
	• Use of PPEs by labour	✓	Break time but while returning PPEs were used by labourers
	• Fatal accident during construction	X	No fatal accidents or injuries
23.	Labour camp		
	• Labour camp in good condition with proper ventilation, lighting	✓	
	• Health, hygiene and sanitation	X	Sanitation was not satisfactory so they are instructed to clean site, camp and toilet once a week by making routine
	• Solid waste management form toilets/kitchen	X	Instructed to manage solid waste in coordination with SMC



## Semi-annual Social and Environmental Compliance Monitoring Report January-June 2017

Sn.	Issue/Indicator	Acceptability (✓ or X)	Remarks
	• Separate male and female toilets, clean toilets with adequate supply of water; maintain hygiene	✓	No female worker
	• Communicable and vector borne disease among construction workers, mosquito net at camps	X	
	• Use alcohol and other forms of intoxication by labourers; gambling, quarrel with locals, disrespect local culture and religion, and may promote socially undesirable activities	X	Consume at night but till now no impact to society
24.	Community health and safety issues	X	
25.	Any physical as well as economic displacement due to construction of school	X	
26.	Deforestation and use of wood in construction	X	
27.	Management of chemical waste, fuel, oil and lubricants; Spillage of chemical.	✓	
28.	Provision for mitigating climate change impacts	X	
29.	Establishment of GRM (first level GRC-comprising 5 members)	✓	Community was recently formed
30.	Grievances documented and hearing	X	
31.	Stagnant water/ponds situated close to school	✓	Instructed to close the stagnant ponds
32.	Relocation and impact upon religious /physical /community structure /historical /archaeological sites	X	
33.	Skill development trainings provided to workers by contractor	X	
34.	Orientation for awareness raising training to teachers, students, SMC and local stakeholders on environmental safeguards and disaster management	X	
35.	Erect awareness signboards for public informing community and workers on critical issues like STDs and HIV/AIDS	X	
36.	Encroachment in forest or any conservation area	X	
37.	Clearing of trees	X	
38.	Permits of tree cutting required and received	X	
39.	Compensation of cut trees/tree plantation	X	
40.	Permits required for other purposes	X	
41.	Public awareness campaign and information disclosure during construction	✓	



Semi-annual Social and Environmental Compliance Monitoring Report January-June 2017

Sn.	Issue/Indicator	Acceptability (✓ or X)	Remarks
42.	Impact upon wild life and birds	X	
43.	Illegal fishing and hunting of wild fauna and flora; and its trade	X	
44.	Production and trade of illegal materials	X	
45.	Cleaning site after construction and disposing waste properly	X	
46.	Ineffective mitigation measures found during implementation	X	
47.	Unexpected adverse impacts	X	



**Disaster Resilience Schools Project (DRSP)**  
**Umar Munshi in associate with sub consultants ERM (P) Ltd., PACE (P.) Ltd., &**  
**Progressive Research and Consultancy Service**  
**Checklist for Environmental, GESI, and Social Safeguard Monitoring**

**Name of Contractor/Contract ID:** Shrama/Swochchanda/khani J.V

**Name of School:** Shree Devi Secondary School

**Location:** Saudal- 9, Bhaktapur

**Initial Contract Amount (NRs.):** 37,367,072.80

**EMP provision**

**in BOQ (NRs.): Start Date:** 24 Dec 2018

**Intended Completion Date:** 17 July 2020

**Checklist for the monitoring of Environmental, GESI, and Social Safeguards in DRSP (Year 2019)**

Sn.	Issue/Indicator	Acceptability (✓ or X)	Remarks
	<b>For school construction period</b>		
1.	Contractor's environmental assurance officer (CAO) appointed (in each project district (CAO) to DLPIU and CLPIU).	X	
2.	Implementation plan proposed by the Contractor.	X	
3.	Environment & Social safeguard screening report for each school site is in place.	X	
4.	Due diligence report (DDR) for each school selected for reconstruction is in place which shall include land owner's certificate of school.	X	
5.	Environment Management Plans (EMP) to be implemented that need to be followed by the contractor and is incorporated in the Bidding document.	X	
6.	Condition of slope of stability around school area is good.	X	Slope steep at right side of toilet
7.	Landslide and gully erosion existed close to the school area that may cause risk to the school infrastructure.	X	
8.	Provision of bioengineering for slope protection	✓	Retaining wall should be constructed at right side of toilet
9.	Impact upon top soil/cultivated land.	X	
10.	Spoil management/tipping sites	X	



Sn.	Issue/Indicator	Acceptability (✓ or X)	Remarks
11.	Provision of drainage and its proper management (Follow 8.6 Drainage; pg; 61 of EARF)	X	
12.	Loss of land or acquisition of new land beyond existing school area	X	
13.	Change in land use/ landscape	X	
14.	Dust/air pollution due to construction activity/ movement of construction vehicle	X	
15.	Dust/air pollution due to operation of stone crushing/quarries and borrow pits	X	
16.	Dust/air pollution due to vehicle passing by school (Traffic sign shall be kept mentioning —School Zone, Speed control measures like bumps shall be kept. Plantation of trees around periphery of school will act as dust and noise barrier)	X	
17.	Air quality monitored	✓	
18.	Pollution or impact upon water bodies due to construction	X	
19.	Water quality monitored	✓	
20.	Noise during construction	✓	
21.	Employment opportunity/number of employs	✓	
22.	Occupational health and safety of construction workers	✓	
	• Insurance of workers	✓	
	• Safety construction practice	✓	
	• Safety barricade or fencing, Sign board on safety awareness, caution tape around under construction area.	✓	
	• Emergency safety measures of contractor in place	✓	Emergency number is available
	• No child labour	X	
	• First aid box in place close to construction site	✓	
	• Use of PPEs by labour	✓	
	• Fatal accident during construction	X	
23.	Labour camp	✓	Rented house near by construction site
	• Labour camp in good condition with proper ventilation, lighting	✓	
	• Health, hygiene and sanitation	✓	
	• Solid waste management form toilets/kitchen	✓	
	• Separate male and female toilets, clean toilets with adequate supply of water;	✓	



## Semi-annual Social and Environmental Compliance Monitoring Report January-June 2017

Sn.	Issue/Indicator	Acceptability (✓ or X)	Remarks
	maintain hygiene		
	• Communicable and vector borne disease among construction workers, mosquito net at camps	X	
	• Use alcohol and other forms of intoxication by labourers; gambling, quarrel with locals, disrespect local culture and religion, and may promote socially undesirable activities	X	
24.	Community health and safety issues	X	
25.	Any physical as well as economic displacement due to construction of school	X	
26.	Deforestation and use of wood in construction	X	
27.	Management of chemical waste, fuel, oil and lubricants; Spillage of chemical.	✓	
28.	Provision for mitigating climate change impacts	X	
29.	Establishment of GRM (first level GRC-comprising 5 members)	✓	
30.	Grievances documented and hearing	✓	
31.	Stagnant water/ponds situated close to school	X	
32.	Relocation and impact upon religious /physical /community structure /historical /archaeological sites	X	
33.	Skill development trainings provided to workers by contractor	✓	
34.	Orientation for awareness raising training to teachers, students, SMC and local stakeholders on environmental safeguards and disaster management	✓	
35.	Erect awareness signboards for public informing community and workers on critical issues like STDs and HIV/AIDS	✓	Safety sign board available in site
36.	Encroachment in forest or any conservation area	X	
37.	Clearing of trees	X	
38.	Permits of tree cutting required and received	X	
39.	Compensation of cut trees/tree plantation	X	
40.	Permits required for other purposes	X	
41.	Public awareness campaign and information disclosure during construction	✓	
42.	Impact upon wild life and birds	X	



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Sn.	Issue/Indicator	Acceptability (√ or X)	Remarks
43.	Illegal fishing and hunting of wild fauna and flora; and its trade	X	
44.	Production and trade of illegal materials	X	
45.	Cleaning site after construction and disposing waste properly	√	
46.	Ineffective mitigation measures found during implementation	X	
47.	Unexpected adverse impacts	X	
<b>For school operation period</b>			
1.	Provision of first aid box in school during operation	√	
2.	Provision of separate toilets for boys, girls, school teachers and staffs.	√	
3.	Provision of separate latrine and toilets (One latrine should be designed for about 30 pupils)	√	
4.	Provision for disabled friendly toilets	√	
5.	Good orientation of school building in design	√	
6.	Good ventilation planned for class rooms	√	
7.	Lighting facility planned	√	
8.	All time electricity available in school	√	
9.	Provision of renewable energy/alternative source of energy/solar power	√	
10.	Provision of changing room and WASH (water, sanitation and hygiene) facilities	√	
11.	Provision for the installation of incinerators for disposal of sanitary pads and training provided on its operation and maintenance	√	
12.	Health and Hygienic facilities (Hand washing facility, safe disposal of human excreta, safe disposal practice)	√	
13.	Provision of school safety (firefighting, earthquake, hail stone, thunder storm, flood etc.)	√	
14.	Provision of emergency situation during disaster (emergency alarming system etc.)	X	
15.	Safe water supply in school (Regular testing of drinking water at least once a year)	√	
16.	Main source of water (and its perennial availability)	√	



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Sn.	Issue/Indicator	Acceptability (√ or X)	Remarks
17.	Alternative sources for water supply (and its perennial availability)	X	
18.	Provision of rainwater harvesting scheme in school	√	
19.	Hygienic day meal to the students	X	
20.	Provision of Solid waste management	√	
21.	Provision for school wastewater treatment and safe handling	√	
22.	Provision of dust bin, waste disposal pits etc.	√	
23.	Provision for noise minimize during operation	√	
24.	Provision for emergency situation during disaster (Ensure emergency equipment and facilities like fire extinguisher/water hose, first aid boxes, whistles, torch lights etc.;)	√	

**Name and signature of Environment Monitor (EM) filling the checklist:**

**Nabina Karki Gautam**



**Date: 2019**

*Note: EM will be responsible to convey any unsatisfactory or unacceptable issues due to construction to contractor as well as client after filling the checklist.*



**Appendix 4: Environment Safeguards Compliance Matrix**



## Disaster Resilience of Schools Project (DRSP)

Environment Safeguards Compliance Matrix for RECON1 \*Ranking Score (Poor= below 55; Average= 56-70, Fair 71-80; Good 81-90)

Sn.	Name of School/Code	Pre-construction stage		Construction Stage			Construction site Safety (Barricade/ Fencing) provided	Slope stability around school	Storm water drainage managed	Construction waste disposed safely	Good housekeeping of construction materials	No Air/Dust pollution during construction	No noise pollution during construction	No water pollution during construction	No impact on tree and vegetation	Impact on Public (Agriculture/Houses/B business)	Social Issues due to labourers (Eg. Use alcohols, fights, disrespects)	Gender issues addressed	No land acquisition issues	First Aid Facility available	No construction Injuries/ Accident	PPE supplied to labourers
		EMP Cost included in BOQ	Safety and PPE to workers provision in	Total Score of Pre-construction stage	Contractor's environment assurance officer appointed+Office	Information Board, Safety Boards established																
	Score	4	2	6	3	3	5	3	3	5	8	4	3	4	3	2	3	3	3	4	5	5
	Okhaldhunga																					
1	Sunkoshi S.S, Balakhu	4	2	6	1	2	1	1	0	1	4	3	2	4	3	1	3	3	3	2		2
2	Rajyalaxmi S.S, Ubu			0																		
3	Gramodaya Yu.Si. S.S, Sinkichaur	4	2	6	1	0	0	2	0	1	4	3	2	4	3	1	3	3	3	0		2
4	Katunje S.S, Katunje	4	2	6	1	2	1	3	0	3	4	3	2	4	3	1	2	3	3	3		2
5	Fulmati S.S, Khijiphalate	4	2	6	1	0		2	0	1	4	3	2	4	3	1	3	3	3	0		2
6	Jaipa S.S, Kalimati	4	2	6	1	0	3	3	0	1	4	3	2	4	3	1	3	3	3			2
7	Hinganga S.S, Rwaou	4	2	6	0	0	0	1	0	1	4	3	2	4	3	1	3	3	3	0		2
8	Jaipa S.S, Tarkerabari	4	2	6	0	0	0	2	0	1	4	3	2	4	3	1	3	3	3	0		2
	Sindhuli																					
9	Janapremi SS(JAMI)	4	2	6	1	2	1	1	2	3	3	4	4	3	2	2	3	3	3	4	5	1
10	Champadevi SS(CHVI)	4	2	6	1	2	3	1	2	2	6	4	2	3	2	2	2	3	3	4	5	3
11	Janajyoti SS (JATI)	4	2	6	1	3	4	2	2	4	4	4	2	3	2	2	3	3	3	4	5	5
12	Kausika SS (KAHA)	4	2	6	1	3	5	3	3	2	6	4	3	3	3	2	3	3	3	4	5	5
13	Sankareswor SS (ASOR)	4	2	6	1	2	2	3	3	3	3	4	4	3	3	2	3	3	3	4	5	5
14	Sri Pragatisil SS (SRIL)	4	2	6	1	3	5	2	3	4	6	4	2	4	3	2	3	3	3	4	5	3
15	Shree SS, Khayarsal (SHEEK)	4	2	6	1	1	2	3	3	3	4	4	3	4	3	2	3	3	3	4	5	4
16	Kyaneswor SS (KYOR)	4	2	6	1	2	2	3	3	3	4	4	3	4	3	2	3	3	3	4	5	1



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66	Shree-Kavresthali
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