

PHILIPPINES

DEPARTMENT OF EDUCATION



INFRASTRUCTURE FOR SAFER AND RESILIENT SCHOOLS (ISRS) PROJECT

(P180936)

ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK
(ESMF)

DRAFT

FEBRUARY 2024

Table of Contents

Executive Summary	7
Environmental and Social Risk Assessment and Management	8
Implementation and Monitoring Arrangements	9
1 Introduction.....	11
2 Project Description.....	12
2.1 Implementing Agency	12
2.2 Rationale for Project Implementation	12
2.3 Project Objectives and Components.....	13
2.3.1 Component 1: Relatively Simple Works for School Infrastructure Recovery to be implemented by DepEd 13	
2.3.2 Component 2: Relatively Complex Works for School Infrastructure Recovery to be implemented by DPWH 14	
2.3.3 Component 3: Project Management, Monitoring and Evaluation	14
2.3.4 Component 4: Contingent Emergency Response Component – CERC (zero allocation).....	15
2.3.5 Project Cost	15
2.4 Proposed Sub-project Types	15
2.4.1 Component 1: Relatively Simple Works for School Infrastructure Recovery	15
2.4.2 Component 2: Relatively Complex Works for School Infrastructure Recovery.....	16
2.5 Target Areas	17
2.6 Project Beneficiaries and Benefits	19
2.7 Project Coordination and Implementation Arrangements	19
3 Environmental and Social Policies, Regulations, and Laws.....	24
3.1 Overview of the World Bank’s (WB) Environmental and Social Standards (ESS) and Relevant Philippine Laws and Regulations.....	24
3.2 National Environmental and Social Assessment and Permitting.....	32
4 Environmental and Social Baseline	35
4.1 Baseline Condition of School Facilities.....	35
4.2 Environmental Baseline.....	36
4.2.1 Exposure to Natural Hazards.....	36
4.2.2 Observed Climate Trends and Projected Climate Change	38
4.2.3 Environmental Baseline by Region.....	42
4.3 Social Baseline	53
4.3.1 Poverty Incidence.....	53
4.3.2 Education and Health	56
4.3.3 Indigenous Peoples	57
4.3.4 Security and Conflict Areas	60
5 Environmental and Social Risk Management.....	63
5.1 Risk Assessment Methodology.....	63
5.2 Identification and Assessment of Potential Environmental and Social (E&S) Risks and Impacts.....	63
5.3 Planning and Design Considerations for Avoidance of Environmental and Social Risks and Impacts	69
5.4 Potential Environmental and Social (E&S) Benefits of the Project	69
5.5 Mitigation Measures and Risk Management	70
6 Procedures and Implementation Arrangements	73
6.1 Environmental and Social Risk Management Procedures	73
6.1.1 Subproject Assessment and Analysis – E&S Screening	74
6.1.2 Subproject Formulation, Planning and development of E&S Documents.....	76

6.1.3	Review, Approval, and Disclosure of E&S Documents	77
6.1.4	Implementation and Monitoring – E&S Implementation	78
6.1.5	Review and Evaluation – E&S Completion	78
6.2	Technical Assistance Activities	79
6.3	Contingency Emergency Response Component	79
6.4	Implementation Arrangements.....	79
6.5	Reporting Arrangements.....	80
6.6	Proposed Training and Capacity Building.....	81
6.7	Estimated Budget.....	82
7	Stakeholder Engagement, Disclosure, and Consultations	83
7.1	Consultation during ESMF Preparation.....	83
7.2	Stakeholder consultations during implementation	85
7.3	Disclosure of the ESMF.....	85
8	Grievance Redress Mechanism	86
8.1	Objectives and Core Principles.....	86
8.2	Grievance Structure	87
8.3	Grievance Uptake.....	88
8.4	Grievance Log.....	88
8.5	Publicly Advertised Procedures.....	90
8.6	Appeals Process.....	90
8.7	Gender-Based Violence (GBV), Sexual Exploitation and Abuse-Sexual Harassment (SEA-SH), and Sexual Orientation, Gender Identity, and Expression (SOGIE) Related Grievances.....	91
9	Annexes	92

List of Annexes

Annex 1: E&S Screening Checklist, and Forms for Subprojects	93
Annex 2: ESMP Template	100
Annex 3: Environmental and Social Codes of Practice (ESCAP).....	112
Annex 4. Summary of Stakeholder Inputs.....	123

List of Tables

Table 1: Project Cost and Financing by Component	15
Table 2: Number of Recovered Schools, Buildings, and Classrooms, and Benefiting Students under Component 1	16
Table 3: Number of School Buildings to be Intervened, by Number of Storey under Component 2	17
Table 4: Target Regions and Provinces	18
Table 5: Implementation Arrangements for Repair, Rehabilitation and Pilot reconstruction including Operations and Maintenance to be implemented by the DepEd.....	21
Table 6: Implementation Arrangements for the Retrofitting and Reconstruction to be implemented by the DPWH	22
Table 7: Summary of E&S Framework and Gaps between World Bank and Relevant Laws and Regulations in the Philippines	26
Table 8: Relevant E&S Permits	33
Table 9: Physical Condition of School- buildings, By Region	35
Table 10: Exposure of School Facilities to Earthquake Hazards, By Region	36
Table 11: Exposure of School Facilities to Wind Hazards, By Region.....	37

Table 12: Exposure of School Facilities to Flood Hazards, By Region	38
Table 13: Monthly per Capita Poverty threshold and Poverty Incidence among Population and Among Families, by Region, 2018, 2021	54
Table 14: Magnitude of poor families and poor population by Region, 2015, 2018, 2021	55
Table 15: Risk Assessment Rating System.....	63
Table 16: Potential E&S Risks and Impacts	65
Table 17: Potential Environmental and Social Benefits	69
Table 18: Project Cycle and E&S Management Procedures.....	73
Table 19: E&S Exclusion List	74
Table 20: E&S Instruments and their Applicability.....	76
Table 21: Roles and Responsibilities for Environmental and Social Risk Management	79
Table 22: Summary of Reporting Arrangements	80
Table 23: Proposed Training and Capacity Building Approach	81
Table 24. ESMF Implementation Budget	82
Table 25: School-level Stakeholder Consultations	84

List of Figures

Figure 1. ISRS Project Selection and Prioritization Framework	17
Figure 2: E&S Considerations and DepEd-DPWH Collaboration	21
Figure 3: Coverage Screening Process for Environmental Assessment Requirement under the Philippine EIS System	33
Figure 4: Spatial distribution of Annual Average Temperature & Projected Temperature Changes	39
Figure 5: Observed trends in annual total rainfall in the Philippines during the period from 1951 to 2010	40
Figure 6: Observed trends in seasonal total rainfall in the Philippines from 1951 to 2010	41
Figure 7: Sea Level Change in the Philippines for 1993-2015	42
Figure 8: Cluster of Provinces Color-coded Map 2021 Full year Poverty Incidence Among Families	56
Figure 9: Philippine Map illustrating territorial distribution of the major ethnographic classifications of Philippine Indigenous Peoples	58
Figure 10: Philippine Map overlay of ancestral domains and the remaining forest cover in the Philippines.....	59
Figure 11: GRM Implementation Structure.....	88
Figure 12: Grievance Resolution Process	90

Abbreviations and Acronyms

BEFF	Basic Education Facilities Fund
BSPMC- UPMO	Buildings and Special Projects Management Cluster Unified Project Management Office
CERC	Contingency Emergency Response Components
CESFA	Philippines Country Environmental and Social Framework Assessment
COC	Code of Conduct
Coc	Certificate of Completion
COFA	Certificate of Final Acceptance
COVID-19	Coronavirus Disease 2019
CSC	Construction Supervision Consultant
DEPED	Department of Education
DPWH	Department of Public Works and Highways
DEDs	Detailed Architectural and Engineering Designs
DENR	Department of Natural Resources
MGB	Mines and Geosciences Bureau
DOLE	Department of Labor and Employment
DRRMS	Disaster Risk Reduction and Management Service
E&S	Environmental and Social
ECC	Environmental Compliance Certificate
EFD	Education Facilities Division
EHS	Environmental, Health and Safety
EMDP	Ethnic Minority Development Plan
ESA	Environmental and Social Assessment
ESCOPs	Environmental and Social Codes of Practice
ESCP	Environmental and Social Commitment Plan
ESIA	Environmental and Social Impact Assessment
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESRS	Environmental and Social Risk Summary
ESSD	Education Support and Services Division
ESSs	Environmental and Social Standards
Execom	Executive Committee
FSS	Feasibility Studies
IBRD	International Bank for Reconstruction and Development
ICCs	Indigenous Cultural Communities
IP	Indigenous Peoples (IP)
IRR	Implementing Rules and Regulations
ISRS	Infrastructure for Safe and Resilient Schools
GBV	Gender- based violence
GIIP	Good International Industry Practice

LGUs	Local Government Units
LMP	Labor Management Procedures
MOA	Memorandum of Agreement
NCIP	National Commission on Indigenous People
OHS	Occupational Health and Safety
OSHC	Occupational Safety and Health Center
OUSIF	Undersecretary for School Infrastructure and Facilities
PAD	Project Appraisal Document (PAD)
PCN	Project Concept Note
PEISS	Philippine Environmental Impact Statement System
PFSs	Pre- Feasibility Studies
PMU	Project Management Unit
PWDs	Persons with disabilities
RAP	Resettlement Action Plan
REA	Regional Environmental Assessment
RPF	Resettlement Policy Framework
SEA	Strategic Environmental Assessment
SEA/SH	Sexual Exploitation and Abuse and Sexual Harassment
SEP	Stakeholder Engagement Plan
SGOD	Schools Governance and Operations Division
SIF	School Infrastructure Facilities
SIMO	School Infrastructure Management Office
TLS	Temporary Learning Spaces
TMC	Technical Management Consultant
USD	United States Dollar
UPMO	Unified Project Management Office
VRA	Visual reinforcement audiometry
WINS	Wash in Schools
WB	World Bank
WBGs	World Bank Groups
WHO	World Health Organization

Executive Summary

The World Bank will be supporting the Department of Education in implementing the Infrastructure for Safe and Resilient Schools (ISRS) Project. The project design strategically integrates efforts to address physical recovery and enhance the resilience of disaster-affected school infrastructure in selected regions. It will address the need of recovering school infrastructure in the short-term, mostly affected by tropical cyclones and earthquakes between 2019-2023. This will contribute towards overcoming the problem of learners attending schools in poor physical condition, including Temporary Learning Spaces. The project will also support DepEd's capacity to operate, maintain and recover school infrastructure through strengthening implementation capacity and operation and maintenance tools and procedures.

The project will be implemented by the DepEd in partnership with the DPWH. The latter will be implementing Component 2 of the project and through learning by doing approach, the DPWH will provide support to the DepEd in implementing the pilot reconstruction works of simple structures.

Four main lines of intervention are defined for the recovery of damaged school buildings: repair, rehabilitation, retrofitting, and reconstruction.

Repair line of intervention is defined as simple, small-scale replacement of school building components which have been damaged that are either of architectural or engineering system, but not of main structural system that is subject to critical structural loads and stresses, and which is estimated to cost less than about 30% of new reconstruction cost per classroom on average. Repair is intended to maintain the expected useful life and the capacity of the building as originally designed and built.

Rehabilitation line of intervention is defined as relatively simple, medium-scale replacement of school building components which have been damaged including structural and other engineering and/or architectural components, or which is estimated to cost about 30% to 40% of new reconstruction cost per classroom on average. Rehabilitation is intended to maintain the expected useful life and the capacity of the building as originally designed and built.

Retrofitting will be the line of intervention for existing school buildings that do not comply with the current seismic and wind loading provisions of the National Structural Code of the Philippines (NSCP). Identified structures will be retrofitted according to these standards to ensure the safety of the users and to prolong the life of these structures.

Reconstruction will target damaged-beyond-repair school buildings. The design of these new buildings will fully comply, not only with resilience provisions, but also current national regulations, reference standards, and appropriate statutory codes to improve the physical learning environment.

In addition to the infrastructure interventions of damaged school buildings, mitigation measures within the school campus such as slope protection or enhancement of drainage system will also be financed by the project. These interventions should not only address resiliency concerns but should also be designed to comply with current national regulations, reference standards and statutory codes as appropriate to improve the physical learning environment by improving functional conditions of beneficiary school facilities and ensure implementation of necessary environmental and social safeguards. Interventions supported by the proposed project will be integrated at school facility level. Relocation of school facilities due to exposure to high hazard prone areas would not be financed by the project but the government's regular programs.

The project will support the following activities:

- **Component 1: Relatively Simple Works for School Infrastructure Recovery and O&M Strengthening**
 - Sub-component 1.1 : Detailed Architectural and Engineering Designs, School Infrastructure Planning and O&M procedures
 - Sub-component 1.2 : Repair, Rehabilitation, and Pilot Reconstruction Works
- **Component 2: Relatively Complex Works for School Infrastructure Recovery**
 - Subcomponent 2.1: Detailed Architectural and Engineering Designs (DEDs) and Construction Supervision
 - Subcomponent 2.2: Repair, Rehabilitation, Retrofitting and Reconstruction Works.
- **Component 3: Project Management, Monitoring and Evaluation (M&E)**
 - Subcomponent 3.1: DepEd Project Management
 - Subcomponent 3.2: DPWH Project Management
- **Component 4: Contingent Emergency Response Component (CERC)**

Details on these various components are described in Chapter 2 (Project Description).

A fixed and final list of beneficiary school facilities is not included at the appraisal stage. Instead, eligibility, selection, and prioritization criteria along with the would-be-selected of schools are established. Based on DepEd's NSBI, there are 47,382 schools all over the country that are exposed to various levels of potential hazards by earthquake, severe wind, flood, or other less-common hazards. Out of these schools, around 35,767 schools, or 75 percent are candidate schools (i.e., schools needing interventions). From the list of candidate schools, around 5,024 schools with 37,022 school buildings are considered eligible for funding under the project. Based on a set of selection and prioritization criteria, a list of would-be selected schools was generated and will be adjusted and finalized based on the results of field inspections and technical validation at the implementation stage.

This Environmental and Social Management Framework (ESMF) has been prepared to identify the potential environmental and social risks and impacts of proposed Project activities based on currently available data and propose suitable mitigation measures to manage these risks and impacts. It maps out the Philippine laws and regulations and the World Bank policies applicable to the Project, and describes the principles, approaches, implementation arrangements, and environmental and social mitigation measures to be followed.

Environmental and Social Risk Assessment and Management

Considering the applicable laws, rules and regulations as well as World Bank's Environmental and Social Standards (ESS) as discussed in Chapters 3 and 4, the following instruments were prepared for the identification, management and mitigation of the environmental and social risks of ISRS Project :

1. **Environmental and Social Management Framework (ESMF)** - the ESMF shall provide guidance to the implementor as well the various stakeholders on the various environmental and social considerations that must be included in determining the final program and scope of works to be made in a particular school whether reconstructing school buildings, and repair, rehabilitation and retrofitting of existing school buildings. This will also include the Indigenous Peoples Education (IPed) Policy and Guidelines of DepEd that will be used and followed for project sites in IPed designated schools, schools located within the Ancestral Domains and/or schools with substantial IP student population. The various factors discussed in the ESMF document are vital in ensuring that the interventions made by the bank are the most proper and acceptable to all stakeholders and the project as well.

2. **Labor Management Procedures (LMP)** - The Labor Management Procedures in this document shall be the reference of the various implementers and stakeholders for this particular project. The compliance on the various guidelines, codes and laws discussed in this document are necessary to ensure that no labor violations are being made in the project and that any labor disputes that may arise in the project are addressed properly following the GRM as outlined in the LMP.
3. **Stakeholder Engagement Plan (SEP)** - The Stakeholder Engagement Plan (SEP) prepared for this project will be the reference for ensuring that all identified and interested stakeholders are properly informed and consulted about the project. The SEP will outline key messages and actions, agency or individual roles and responsibilities, frequency and more importantly, a clearly defined grievance redress mechanism for the public.
4. **Environmental and Social Commitment Plan (ESCP)** – This instrument outlines the material measures and actions that Department of Education (DepEd) and Department of Public Works and Highways (DPWH) shall carry out or cause to be carried out including as applicable the timeframes of action and measures, institutional and staffing roles, monitoring and reporting arrangements. With the Bank's approval, this document forms part of the Loan Agreement and can be revised as necessary to as part of adaptive management of the Project and to respond to emerging concerns and performance of the Project.

In this ESMF, the common environmental and social risks were identified and the risk level for each identified risks were evaluated based on experiences of the DepEd and DPWH in managing these types of risks. This, along with the risk assessment methodology and the identification of potential E&S benefits, risks, impacts and mitigation measures as well as relevant planning and design considerations are discussed in detail in Chapter 5.

Chapter 6 tackles the procedures and implementation arrangements for managing environmental and social risks for the project. As part of the procedures, an exclusion list is provided to rule out subprojects with significant risks that are unavoidable. Procedures of subproject assessment and analysis including screening, review, approval, disclosure, implementation, monitoring and evaluation is also presented in this chapter and annexes containing templates are provided for easy reference. This chapter also includes discussions on technical assistance activities, implementation and reporting arrangements, the proposed training and capacity building and estimated budget.

Stakeholder Engagement, Disclosure and Consultations are tackled in Chapter 7 and Grievance Redress Mechanism, in Chapter 8.

Implementation and Monitoring Arrangements

The DepEd is the proponent and lead agency for the ISRS project. DepEd, a government agency in charge of the country's basic education system is partnering with the DPWH, the engineering and construction arm of the government, for this project. DepEd will be the implementing agency for Component 1– Relatively Simple Works which will involve the major repair, rehabilitation and pilot reconstruction of single storey buildings, and the DPWH for Component 2- Relatively Complex Works which will involve the retrofitting and reconstruction works. The ESMF shall be an integral part of subproject implementation for Component 1 and Component 2 activities and shall be integrated into the DepEd and DPWH project management systems under Component 3.

The monitoring of the ESMF implementation shall be integrated in the overall project monitoring and evaluation. Related management reports which are the basis of the DepEd and DPWH management in the decision-making process shall be based on the reports submitted by the DPWH, Buildings and Special Projects Management Cluster-Unified Project Management Office BSPMC-UPMO and DepEd Division Offices as a result of their site visits and validation of accomplishments. The monitoring of the projects under this project will be basically

anchored with the existing DepEd Order No. 18 s. 2023 (Revised Multi-Year Guidelines on the Implementation of the Basic Education Facilities Fund (BEFF) and the existing Memorandum of Agreement (MOA) between DepEd and DPWH on the implementation of the BEFF Classroom Construction.

The school officials, DepEd and DPWH Division, District and Regional Personnel who will be involved in the sub-project implementation shall be trained on the use of the ESMF. Training needs assessment shall be conducted as the basis for the formulation of an appropriate training plan/program. Relevant provisions in the ESMF shall be incorporated in the contractors' contract including the hiring/designation personnel who will oversee environmental and social risk management.

The total estimated budget for the implementation of the ESMF is \$ 430,000.00. Details of the implementation and monitoring arrangements for the ESMF is discussed in Chapter 6.

A separate **Stakeholder Engagement Plan** (SEP) has been prepared for the Project, based on the World Bank's Environmental and Social Standard 10 on Stakeholder Engagement. The SEP is publicly disclosed and can be accessed through these links:

- www.deped.gov.ph
- <http://schoolbuildings.deped.gov.ph>
- www.dpwh.gov.ph

1 Introduction

The proposed project will apply the World Bank Environmental and Social Framework (ESF) and comply with applicable relevant Philippines laws and regulations. Nine out of the ten Environmental and Social Standards (ESSs) in the ESF are relevant to the Project, including: i) ESS1 - Assessment and Management of Environmental and Social Risks and Impacts; ii) ESS2 - Labor and Working Conditions; iii) ESS3 - Resource Efficiency and Pollution Prevention and Management; iv) ESS4 - Community Health and Safety; v) ESS5 - Land Acquisition, Restrictions on Land Use and Involuntary Resettlement; vi) ESS6 - Biodiversity Conservation and Sustainable Management of Living Natural Resources; vii) ESS7 - Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities; viii) ESS8-Cultural Heritage; and ix) ESS10 - Stakeholder Engagement and Information Disclosure.

The preparation and disclosure of an Environment and Social Management Framework (ESMF) for the Project before appraisal is required under WB's ESS. This ESMF is developed to support the environmental and social due diligence provisions for activities financed by the World Bank in the Infrastructure for Safer and Resilient Schools (ISRS) Project. The project will support the resilient recovery of disaster affected schools in selected regions. The Department of Education (DepEd) and the Department of Public Works and Highways (DPWH) will be implementing the Project activities.

This ESMF follows the World Bank Environmental and Social Framework (ESF) as well as the national laws, local ordinances, and other regulations of the Philippines. The ESMF was developed based on desk reviews of the national relevant laws and regulations as well as available documents containing social and environmental information in the project areas, field surveys to some of the potential project sites, and meetings/consultations/focused group discussion with stakeholders. The ESMF also follows the requirements of the ESSs, the WB's Guidance Note for Borrowers on the Application of the ESSs, the World Bank Groups (WBG's) General Environmental Health and Safety Guidelines, and other Good International Industry Practices.

The objective of the ESMF is to assess and mitigate potential negative environmental and social risks and impacts of the Project consistent with the Environmental and Social Standards (ESSs) of the World Bank ESF and national requirements. More specifically, the ESMF aims to (a) assess the potential environmental and social risks and impacts of the proposed Project and propose mitigation measures; (b) establish procedures for the environmental and social screening, review, approval, and implementation of activities; (c) specify appropriate roles and responsibilities, and outline the necessary reporting procedures, for managing and monitoring environmental and social issues related to the activities; (d) identify the staffing requirements, as well as the training and capacity building needed to successfully implement the provisions of the ESMF; (e) address mechanisms for public consultation and disclosure of project documents as well as redress of possible grievances; and (f) establish the budget requirements for implementation of the ESMF.

This ESMF should be read together with other E&S instruments prepared for the project, including the Stakeholder Engagement Plan (SEP), the Environmental and Social Commitment Plan (ESCP), and the Labor Management Procedures (LMP). All E&S instruments should be applied to all the subprojects and other investment activities to be financed by the project.

2 Project Description

The Infrastructure for Safer and Resilient Schools (ISRS) Project aims to support resilient recovery of disaster-affected schools, particularly those affected by tropical cyclones and earthquakes between 2021-2023. Resilient recovery entails that the performance of the recovered infrastructure will be better in case future hazard events occur. It also refers to the functional continuity of the network of schools and the ability of the education system to reduce the disruption of the delivery of services. The project will be composed of different components which will include the repair, rehabilitation, retrofitting and reconstruction of priority calamity damaged school buildings. This will also include improvement and strengthening of procedures and tools and training of involved DepEd's units to ensure the sustainability of the project outcomes. Project management components will also form part of the project to provide management support in the implementation of the project.

2.1 Implementing Agency

Since the project involves school infrastructure for basic education facilities, DepEd is the proponent and lead agency for the ISRS project. DepEd will be the implementing agency for Component 1– Relatively Simple Works which will involve the major repair, rehabilitation and pilot reconstruction of single storey buildings. The Department of Public Works and Highways (DPWH), a government agency mandated to undertake infrastructure planning, design and construction of public works, is DepEd's partner implementing agency for Component 2- Relatively Complex Works which will involve the retrofitting and reconstruction.

The DPWH and the DepEd will coordinate project activities, including day-to-day implementation, coordination, supervision, and overall management of project activities.

2.2 Rationale for Project Implementation

The country's school infrastructure is highly exposed and vulnerable to the disruptive impacts of geological and climate-related hazard events. Every year, many school buildings in public elementary and secondary schools nationwide are damaged by calamities. Actual damage exacerbates the already serious school infrastructure deficit. A large number of school infrastructures have been destroyed by geological and climate-related adverse events, including typhoons, floods, earthquakes, and landslides. DepEd data shows that there is an increasing trend in the number of schools affected by various hazard events every year and the damages were uneven across the country. However, the largest impacts were mostly due to earthquake events or hydrometeorological events. Typhoons Karding (2022) and Odette (2021) most significantly impacted CARAGA, Central Luzon, MIMAROPA, Western Visayas, Central Visayas, and Eastern Visayas, while Abra Earthquakes (2022) and Davao Earthquake (2021) mostly affected Cordillera Administrative Region (CAR), Ilocos, Cagayan Valley, Central Luzon, and Davao regions.

As a result of the recurring disasters, over one million students use Temporary Learning Spaces (TLS), makeshift schools, or other informal spaces like under trees. There is continuous struggle for the education system to cope with a growing number of affected learners and teachers, loss of classrooms, class disruptions, unsafe learning environment and economic losses. The impact of disasters on school infrastructure further exacerbates the GoP's efforts to improve the condition of existing schools and quality of the physical learning environments and expand the classroom supply countrywide. Many of the schools do not have sufficient water, sanitation and hygiene (WASH) facilities, are not designed for universal access (usable by a wide range of people, regardless of age, size or disability status) and are not gender responsive.

As of March 2023, DepEd's Status Report 2021-2023 on the list of funded and unfunded schools affected by calamities indicates that only 15 percent of schools in need have received funding. To address the cumulative

impacts from large-scale catastrophic events as well as recurrent events which destroy and damage school infrastructure and disrupt the education service every year, the GoP has requested World Bank financial and technical support for the large portfolio of disaster-affected schools across the country through the proposed project. This is part of the broader government efforts outlined in the 2023 education agenda which prioritizes, among other areas, ensuring educational facilities are resilient to disasters.

2.3 Project Objectives and Components

The Infrastructure for Safer and Resilient Schools (ISRS) Project aims to support resilient recovery of disaster-affected schools by improving performance of infrastructure in overcoming future hazard events. It also refers to the functional continuity of the network of schools and the ability of the education system to reduce the disruption in the delivery of services. The different lines of interventions as discussed below will be made on the school buildings depending on the result of the detailed validation made by the DepEd and the DPWH Engineers.

Components 1 and 2 will be the main components of the projects wherein actual school site assessment, preparation and finalization of detailed engineering designs, procurement, implementation and completion of school building repair, rehabilitation, retrofitting and reconstruction will be carried out. Further, functional improvements needed by the school will be included in the program based on the result of site validation and assessment.

Functional improvements are interventions at the school level related to the improvement of gender inclusive WASH facilities reported in bad condition, the provision of solar panels for schools without power, the implementation of rooms in the buildings for counseling services and the improvements of canteens. The technical validation will define whether a school requires any or all of the interventions mentioned above based on the condition of the school facility. Furniture will also be provided for very classrooms and school buildings reconstructed by the project.

2.3.1 Component 1: Relatively Simple Works for School Infrastructure Recovery to be implemented by DepEd

This component will finance investments for repair and rehabilitation of selected school facilities for relatively Simple Works, pilot reconstruction as well as strengthening procedures and tools for O&M of recovered school facilities. For clarity, Relatively Simple Works shall be defined and described as infrastructure works at a school where at least 1 building needs Repair or Rehabilitation (see definition below) and no other buildings need Retrofitting or Reconstruction. For clarity, relatively simple works shall be defined and described as infrastructure works at a school where at least 1 building needs repair or rehabilitation (see definition below) and no other buildings need retrofitting or reconstruction.

- **Repair** refers to the simple, small-scale replacement of school building components that have been damaged that are either of architectural or engineering system, but not of main structural system that is subject to critical structural loads and stresses, and which is estimated to cost less than about 30% of new reconstruction cost per classroom on average. Repair is intended to maintain the expected useful life and the capacity of the building as originally designed and built.
- **Rehabilitation** refers to the relatively simple, medium-scale replacement of school building components, which have been damaged including structural and other engineering and/or architectural components, OR which is estimated to cost about 30% to 40% of new reconstruction cost per classroom on average.

Rehabilitation is intended to maintain the expected useful life and the capacity of the building as originally designed and built.

- **Pilot reconstruction** refers to the reconstruction of one-story school buildings (including classroom furniture) to be implemented by DepEd with the technical advice and training from DPWH as part of a learning-by-doing strategy for DepEd's capacity building.

2.3.2 Component 2: Relatively Complex Works for School Infrastructure Recovery to be implemented by DPWH

This component will finance investments for retrofitting and reconstruction of selected school facilities for relatively complex works. For clarity, relatively complex works shall be defined and described as infrastructure works at a school where at least 1 building needs Retrofitting or Reconstruction (see preceding definition), and some other buildings may need Repair or Rehabilitation. By its agency mandate, the DPWH shall be responsible for implementing and managing complex works. Design-Build modality may be explored to enhance the rollout of the project.

- **Retrofitting** refers to the relatively complex improvement of the main structural system of a school building which may have been damaged or undamaged that is of relatively older vintage or exposed in a location of relatively higher hazard, and which is estimated to cost less than about 60% of new reconstruction cost per classroom on average. The improvement is intended to upgrade to recent structural standards and may also include other non-structural engineering or architectural components; it is not intended to increase the capacity of classrooms.
- **Reconstruction** refers to the reconstruction of a school building (including classroom furniture), which could have been indicated for either rehabilitation or retrofitting except that the estimated cost of such would exceed about 60% of new reconstruction cost per classroom on average. Reconstruction is intended to conform with recent standards. It may also involve relocation within the same school property.

2.3.3 Component 3: Project Management, Monitoring and Evaluation

This component will support the management, monitoring and evaluation of the proposed project activities. The DepEd and DPWH will have their own Project Management Unit (PMU) for the implementation of the ISRS project. It will support the day-to-day implementation of project activities and will finance technical specialists and consultants and administrative support for the DepEd and DPWH Project Management Units (PMUs) to effectively carry out (i) planning, (ii) planning, coordination, financial management (FM), procurement, contract administration, environmental and social safeguards implementation and compliance, communications, design and implementation of Grievance Redress Mechanism (GRM), and M&E throughout the project implementation period, including ensuring that disaster and climate-resilient standards in DEDs. This component will also finance incremental operating costs (IOCs), PMU training, PMU equipment, and studies and evaluations associated with the project. Specific needs of DepEd and DPWH are as follows:

- **DepEd Project Management.** This subcomponent will support DepEd's (i) PMU operation and training costs, (ii) incremental operating costs; (iii) design and implementation of project communication campaigns; (iv) design and implementation of project GRM; (v) PMU equipment and training, and (vi) studies and evaluations associated with the project. This subcomponent will also support citizen engagement, social awareness, and participation at the school level for Components 1 and 2 all throughout the project implementation to ensure

that (i) the physical investments are properly communicated to the direct beneficiaries of the school buildings and (ii) the concerns of school stakeholders are adequately addressed in the design and implementation. These are expected to enhance the support, commitment, and ownership of stakeholders of the project.

- **DPWH Project Management.** This subcomponent will support DPWH’s (i) PMU operation and training costs, (ii) incremental operating costs; (iii) design and implementation of project communication campaigns; (iv) design and implementation of project GRM; (v) studies and evaluations associated with the project.

2.3.4 Component 4: Contingent Emergency Response Component – CERC (zero allocation)

The CERC will allow the Government of the Philippines to quickly access project funds to respond to an eligible crisis or emergency. It will allow for a rapid reallocation of uncommitted project funds to address urgent needs in the event of a natural or man-made disaster or crisis (including public health-related emergencies).

2.3.5 Project Cost

The Table below summarizes the cost per project component.

Table 1: Project Cost and Financing by Component

Components	Total Cost (US\$ million)	Total Cost (Php million)	World Bank Loan		GOP Counterpart Php million
			US\$ million	Php million	
Component 1: Relatively Simple Works for School Infrastructure Recovery	175.40	9,646.85	157.86	8,682.16	964.68
Component 2: Relatively Complex Works for School Infrastructure Recovery	360.20	19,811.15	324.18	17,830.04	1,981.12
Component 3: Project Management, M&E	20.00	1,100.00	18.00	990.00	110.00
Component 4: Contingent Emergency Response	-	-	-	-	-
TOTAL	555.60	30,558.00	500.0	27,502.20	3,055.80
SHARE	90%	10%			

2.4 Proposed Sub-project Types

As earlier presented, the types of intervention are classified as relatively simple works to be implemented by the DepEd under Component 1 and relatively complex works to be implemented by DPWH under Component 2. The following describes the types of interventions under Components 1 and 2.

2.4.1 Component 1: Relatively Simple Works for School Infrastructure Recovery

This will have two sub-components, with the description of specific activities that will be supported:

- **Subcomponent 1.1: Detailed Architectural and Engineering Designs, School Infrastructure Planning and O&M Strengthening.** This subcomponent will finance architectural and engineering studies and designs required for the repair and rehabilitation of selected school buildings and enhancing school infrastructure planning and O&M manuals, tools, and equipment. Specifically, it will support:
 - (i) detailed damaged and multi-hazard vulnerability assessments at school building level;
 - (ii) geotechnical and other site investigations;

- (iii) architectural and engineering design of either repair or rehabilitation interventions including functional improvements at the school facility level;
- (iv) engineering oversight of construction works;
- (v) upgrade of school infrastructure planning and O&M manuals and tools (enhanced school infrastructure information platform, enhanced post-disaster damage assessment procedures, and program of works preparation procedures) and training for involved units at the central and regional level.

- **Subcomponent 1.2: Repair, Rehabilitation, and Pilot Reconstruction Works.** This subcomponent will finance civil works for repair, rehabilitation, and pilot reconstruction of selected school buildings, including site improvements for resilience purpose and acquisition of classroom furniture and equipment for reconstructed schools under both Component 1 and 2. Approximately 900 (classrooms?) and 380 buildings in 470 school facilities are planned for repair and rehabilitation in all regions. However, most of the repair and rehabilitation works are concentrated in Regions VII, CAR, CARAGA, IV-B, VIII, VI, III and V. Pilot reconstruction by DepEd will include around 135 school facilities (250 one-story school buildings, 3 to 4 classrooms) located in suburban areas where, unlike urban areas, the need for increasing school capacity is not expected[1]. Thus, the new building will remain a one-storey building with the same number of classrooms. Most of these schools have been initially identified in Regions CAR, CARAGA, I, III, IV-B, V, VI, VII, VIII, IX, and XI. This component will also finance site improvement works (as needed) and the acquisition of classroom furniture and equipment for reconstructed schools under Components 1 and 2.

Table 2: Number of Recovered Schools, Buildings, and Classrooms, and Benefiting Students under Component 1

Line of Intervention	Schools	Buildings	Classrooms	Students	Total Cost*	Line of Intervention
					US\$ million	Php million
Repair and Rehabilitation	538	1,512	4,086	212,082	100.82	5,544.87
Pilot Reconstruction	180	476	1,205	38,427	60.37	3,320.59
Total	718	1,988	5,291	250,509	161.19	8,865.46

*Note: The figure does not include furniture for reconstruction (Php 11,465,519) and O&M procedures enhancement (Php 2,741,492).

2.4.2 Component 2: Relatively Complex Works for School Infrastructure Recovery

- **Subcomponent 2.1: Detailed Architectural and Engineering Designs (DEDs).** This subcomponent will finance architectural and engineering studies and designs required for repair, rehabilitation, retrofitting, and reconstruction of selected school buildings for complex works. Specifically, it will support:
 - (i) detailed damaged and multi-hazard vulnerability assessments at the school building level
 - (ii) geotechnical and other site investigations,
 - (iii) architectural and engineering design of either repair, rehabilitation, retrofitting, or reconstruction,
 - (iv) design of school facility functional improvements,
 - (v) design of site improvements,
 - (vi) construction supervision and quality assurance(including oversight of implementation of interventions and contractors’ environmental and social management plans).
- **Subcomponent 2.2: Retrofitting and Reconstruction Works.** This subcomponent will finance civil works for repair, rehabilitation, retrofitting and reconstruction of selected school buildings for relatively complex works, including site improvements for resilience purposes. Approximately 5,758 buildings in 1,172 school facilities

will be intervened under this Component with the distribution of lines of intervention at building level shown in Table 3.

Table 3: Number of School Buildings to be Intervened, by Number of Storey under Component 2

Number of Storey	Repair	Rehabilitation	Retrofit	Reconstruction	Total buildings
1- storey	476	108	639	1197	2420
2- storey	115	36	41	44	236
3- storey	30	9	5	1	45
4- storey	36	23	8	-	67
TOTAL	657	176	693	1242	2768

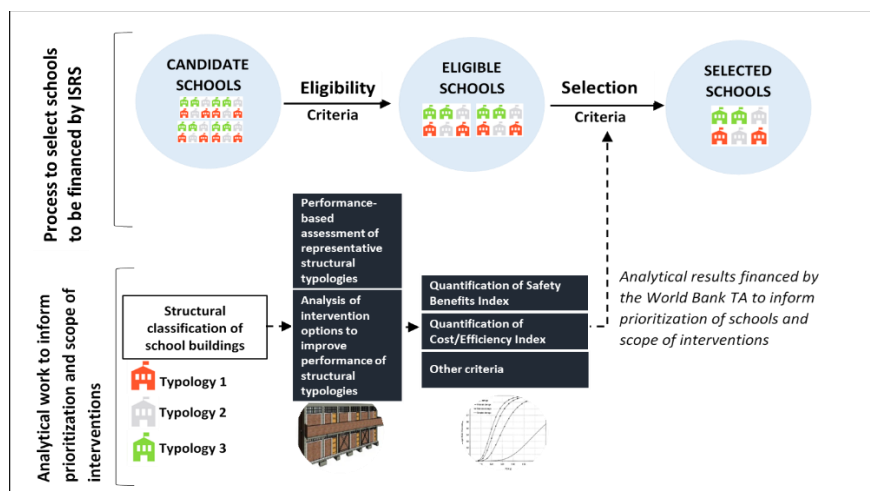
The result of the detailed validation made by the DepEd, and the DPWH Engineers will determine the specific interventions that will be implemented. The following table summarizes the definition of major repair, rehabilitation, retrofitting, reconstruction and site improvement in terms of works on structural systems, functional components and other key features of the specific intervention:

Across all interventions, E&S risks management measures shall be implemented, including relevant planning and design considerations. This shall include design considerations on universal access (especially for PWDs), gender inclusivity and sufficient WASH facilities.

2.5 Target Areas

The resilient recovery of disaster-affected school infrastructure poses four main interlinked challenges for the Government: scale of the problem, building back better, financial needs, and implementation capacity. The scale of the problem has to do with efficiently recovering a high number of school facilities and managing these interventions at scale. To accomplish this, it is necessary to put in place a risk-informed selection and prioritization framework, to optimize affordable and scalable engineering solutions, and to ensure technical capacity among involved agencies, at national and sub-national levels. Figure 1 provides the selection and prioritization framework of schools under the project.

Figure 1. ISRS Project Selection and Prioritization Framework



Source: Technical Analysis, ISRS Project Proposal

Component 1 will provide support to all 16 regions of the country. The National Capital Region (NCR) is not included as it is covered in another World Bank supported project which is the Philippine Seismic Risk Reduction

and Resilient Project (PSRRRP) which involves the retrofitting of school buildings. Repair and rehabilitation will however focus on 16 regions and 58 provinces. Pilot reconstruction works, on the other hand, will focus on five regions and 18 provinces. The interventions under Component 2 will target the provinces that were most heavily affected by disasters from 2019-2023. These include 16 regions and 59 provinces. See Table 4 for the target regions and provinces.

Table 4: Target Regions and Provinces

Region	Province
Component 1: Relatively Simple Works for School Infrastructure Recovery	
A. Repair and Rehabilitation	
Regions (16)	Provinces (58)
1. BARMM:	Maguindanao, North Cotabato, Lanao Del Sur
2. CAR	Abra, Apayao, Benguet, Ifugao, Kalinga, Mountain Province
3. CARAGA	Agusan Del Norte, Dinagat Islands, Surigao Del Norte, Surigao Del Sur
4. Region I	Ilocos Sur, La Union, Pangasinan
5. Region II	Cagayan, Isabela, Nueva Vizcaya
6. Region III	Nueva Ecija, Aurora, Bulacan, Pampanga, Zambales, Bataan
7. Region IV-A	Quezon
8. Region IV-B	Marinduque, Occidental Mindoro, Oriental Mindoro, Palawan
9. Region IX	Zamboanga Del Norte
10. Region V	Albay, Camarines Norte, Camarines Sur, Catanduanes, Masbate, Sorsogon
11. Region VI	Aklan, Antique, Guimaras, Iloilo, Negros Occidental, Capiz
12. Region VII	Bohol, Cebu, Negros Oriental
13. Region VIII	Biliran, Eastern Samar, Leyte, Southern Leyte, Western Samar
14. Region X	Camiguin
15. Region XI	Compostela Valley, Davao Del Norte, Davao Del Sur, Davao Oriental
16. Region XII	North Cotabato, Sarangani, South Cotabato
B. Pilot Schools for Reconstruction	
Regions (5)	Provinces (20)
1. CAR	Abra, Benguet, Ifugao, Mountain Province, Kalinga
2. CARAGA	Surigao Del Norte, Dinagat Islands, Surigao Del Sur
3. Region V	Albay, Camarines Norte, Camarines Sur, Catanduanes, Masbate, Sorsogon
4. Region VII	Bohol, Cebu, Negros Oriental
5. Region VIII	Leyte, Southern Leyte, Western Samar
Component 2: Relatively Complex Works for School Infrastructure Recovery	
Regions (16)	Provinces (62)
1. BARMM	City of Cotabato, Lanao Del Sur, Maguindanao, North Cotabato
2. CAR	Abra, Benguet, Ifugao, Kalinga, Mountain Province
3. CARAGA	Agusan Del Norte, Dinagat Islands, Surigao Del Norte
4. Region I	Ilocos Norte, Ilocos Sur, La Union, Pangasinan
5. Region II	Isabela
6. Region III	Aurora, Bulacan, Nueva Ecija, Tarlac
7. Region IV-A	Batangas, Cavite, Quezon
8. Region IV-B	Marinduque, Occidental Mindoro, Oriental Mindoro, Palawan
9. Region IX	Zamboanga Del Norte, Zamboanga del Sur
10. Region V	Albay, Camarines Norte, Camarines Sur, Catanduanes, Masbate, Sorsogon
11. Region VI	Aklan, Antique, Guimaras, Iloilo, Negros Occidental
12. Region VII	Bohol, Cebu, Negros Oriental

Region	Province
13. Region VIII	Biliran, Eastern Samar, Leyte, Southern Leyte, Northern Samar, Western Samar
14. Region X	Camiguin, Misamis Oriental
15. Region XI	Compostela Valley, Davao Del Norte, Davao Del Sur, Davao Oriental
16. Region XII	North Cotabato, Sarangani, South Cotabato, Sultan Kudarat

2.6 Project Beneficiaries and Benefits

The project will directly benefit students in schools to be included in the project in various target areas nationwide as described in the previous section. This is equivalent to approximately 741,038 students (of which 359,015 are female students) in 4,455 recovered classrooms and 836 new classrooms. In addition, at least 400 DepEd staff will be trained in school infrastructure management, operations and maintenance¹. Representatives of DepEd and DPWH at central and local levels will also benefit from technical capacity building through the wider planning, implementation, and monitoring of activities under the project

Further, it will support the government's initiatives in the following areas:

- Coping with disruption of education services
- Improving access and quality of basic education under the new education agenda MATATAG launched in 2023 (among the priority initiatives is ensuring educational facilities are resilient to disasters)
- improving planning interventions at scale, building back better, and strengthening implementation capacity by strengthening coordination between DepEd and the Department of Public Works and Highways (DPWH)
- human capital investment which is essential in sustaining economic development and growth

2.7 Project Coordination and Implementation Arrangements

The DepEd is the proponent and lead agency for the ISRS project and will partner with the DPWH. DepEd will be the implementing agency for Component 1- Relatively Simple Works, and the DPWH for Component 2 - Relatively Complex Works.

The institutional arrangements for the ISRS Project will build on the existing arrangement between DPWH and DepEd on similar undertakings. The arrangement is in line with the mandate of both agencies to provide school infrastructure. DepEd² has the primary responsibility of formulating and enforcing the policies, standards, and guidelines for the effective and efficient implementation of DepEd programs and projects to do with providing appropriate educational facilities and infrastructure that will create environments most conducive to teaching and learning. DPWH³ is the primary engineering arm of National Government to undertake, following national objectives, the planning, design, construction, and maintenance of public works and highways.

The arrangements are primarily based on existing arrangements under the BEFF and the PSRRRP. Under the BEFF, DepEd carries out repair and rehabilitation while the DPWH implements new construction of school buildings. Under the PSRRRP, DPWH implements the retrofitting of public schools in Metro Manila. Some adjustments in the arrangements for the DepEd component were made to facilitate compliance with the World Bank fiduciary and safeguards requirements considering that DepEd has not implemented school infrastructure projects supported by Official Development Assistance Projects in the last 10 years. As for the DPWH component, the

¹ DepEd Project Proposal – Infrastructure for Safer and Resilient school Projects. Annex 2 Logical Framework

² DepEd, a government entity, mandated by law, particularly B.P. 232, "Education Act of 1982" as amended by R.A. 9155, "Governance of Basic Education Act of 2001."

³ DPWH, a government entity, mandated by law, particularly EO 124 dated January 30, 1987, entitled "Reorganizing the Ministry of Public Works and Highways, Redefining its Power and Functions",

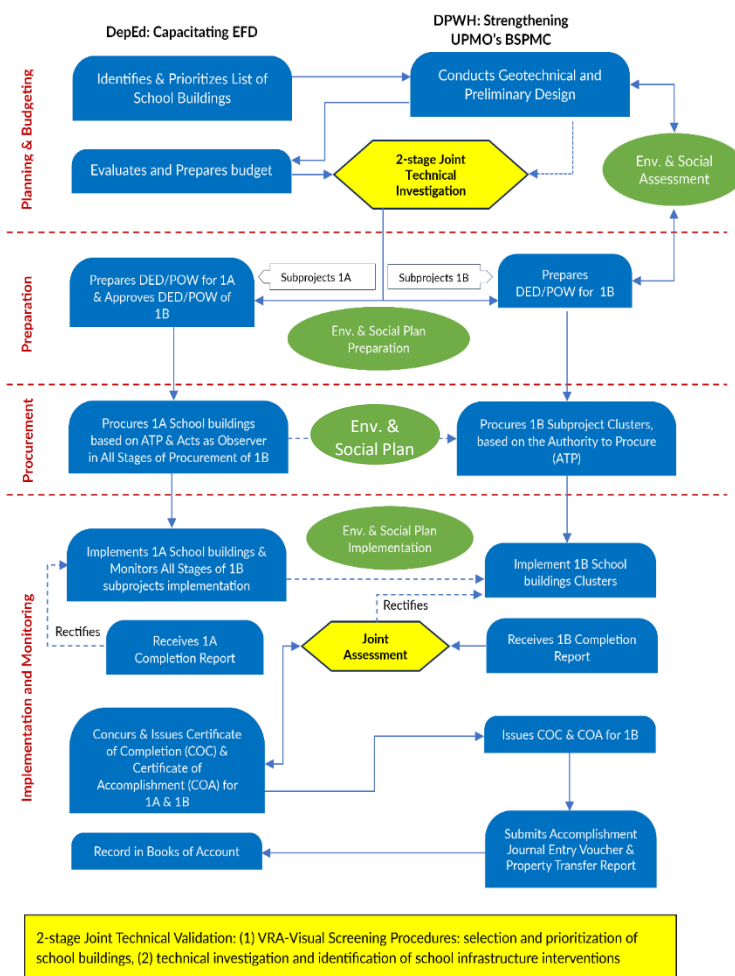
arrangements will generally follow that of the PSRRRP. The partnership between the two agencies under the ISRS is expected to strengthen their implementation of locally assisted programs.

Project Steering Committee. A Project Steering Committee composed of designated representatives from DepEd, DPWH, National Economic and Development Authority (NEDA), Department of Finance, Department of the Interior and Local Government, and DBM will be established to give overall direction and strategic guidance to the PMOs. Among its specific functions, the PSA must ensure efficiency by providing advice to resolve major implementation issues. Membership of the PSC may be expanded to include the Regional DRRM Council, PHIVOLCS, Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA), and the Department of Health (DOH) as the need arises. For issues related to disaster, disaster agencies will be tapped; for WASH issues, DOH's expertise will be sought.

Technical Committee. A Technical Committee will also be established to provide overall technical direction and guidance to the PMOs to resolve implementation issues outside the control of the PMOs (Figure 2). The Technical Committee will be composed of representatives from DepEd (School Infrastructure and Facilities/ Education Facilities Division [EFD]), DPWH Unified Project Management Office-Building and Special Projects Management Cluster (UPMO-BSPMC). If additional technical expertise is needed, the membership can be expanded to include other units from DepEd and DPWH, the academe and professional associations.

Figure 2 presents the process for implementing the different interventions under the project and the individual and joint roles and responsibilities of DepEd and DPWH, also reflecting implementation of the ESMF in every stage.

Figure 2: E&S Considerations and DepEd-DPWH Collaboration



The following tables summarize the implementation arrangements for the key activities under Components 1 to be implemented by DepEd and Component 2 to be implemented by DPWH.

Table 5: Implementation Arrangements for Repair, Rehabilitation and Pilot reconstruction including Operations and Maintenance to be implemented by the DepEd

Activities	Responsible Parties	Intervention
Prioritization of schools that will be funded under the project thru conduct of detailed site validation	Education Facilities Division – Planning and Programming Unit	Training and Capacity building of DepEd engineers on the conduct of vulnerability assessment of school buildings and other structures.
Finalization of Detailed Engineering Designs and Estimates	Education Facilities Division – Planning and Design Unit Regional Engineers Division Engineers Third party service provider that will be hired for the project	Hiring of Firms for the preparation and finalization of Detailed Engineering Designs and Estimates including Construction Management and Supervision

Activities	Responsible Parties	Intervention
Procurement	Bids and Awards Committees of the Regional and/or Division Offices	Training and capacity building for the members of the Bids and Awards Committees on Procurement Guidelines of the World Bank
Implementation and Monitoring	Education Facilities Division – Project Management Unit Regional Engineers Division Engineers School Heads Civil Society Organizations (CSOs), PTA and other community partners	Training and capacity building of engineers, school heads, CSOs, PTA and other community partners on the conduct of monitoring of school building projects. Hiring of Firms for the management and supervision of the project
Payments	Education Facilities Division-Project Management Unit Regional/Division Accountants and Budget Officers	Training and Capacity Building on the Financial Management System for the World Bank ISRS Project
Operations and Maintenance	Division Engineers School Heads	Training and Capacity Building on the Proper Operations and Maintenance of Completed School Buildings Preparation of O and M Manual

Table 6: Implementation Arrangements for the Retrofitting and Reconstruction to be implemented by the DPWH

Activities	Responsible Parties	Intervention
Prioritization of schools that will be funded under the project	Education Facilities Division – Planning and Programming Unit DPWH- Buildings and Special Projects Management Cluster -UPMO	Training and capacity building on the application to be used for the prioritization of schools following the different criteria or parameters that will be used for the project.
Finalization of Detailed Engineering Designs and Estimates	Education Facilities Division – Planning and Design Unit DPWH- Buildings and Special Projects Management Cluster -UPMO Third party service provider that will be hired for the project	Training and Capacity building of DepEd engineers on the conduct of vulnerability assessment of school buildings and other structures.
Procurement	Bids and Awards Committees of the of the concerned DPWH units	Training and capacity building for the members of the Bids and Awards Committees on Procurement Guidelines of the World Bank
Implementation and Monitoring	DPWH- Buildings and Special Projects Management Cluster -UPMO Education Facilities Division – Project Management Unit Regional Engineers Division Engineers	Training and capacity building of engineers, school heads, PTA and other community partners on the conduct of monitoring of school building projects.

Activities	Responsible Parties	Intervention
	School Heads PTA and other community partners	
Payments	DPWH- Buildings and Special Projects Management Cluster -UPMO DPWH Budget and Finance	Training and Capacity Building on the Financial Management System for the World Bank ISRS Project
Operations and Maintenance	Division Engineers School Heads	Training and Capacity Building on the Proper Operations and Maintenance of Completed School Buildings

To ensure implementation of the ESMF, the following shall be done:

- a. Establish and maintain a dedicated Project Management Office (PMO) for the ISRS Project. This will include the establishment of the Environmental and Social Unit (ESU) which will handle E&S issues and concerns as well as monitoring the compliance of the various implementing units in the ESM Framework established for the project.
- b. Develop and implement the Project Operations Manual (OM) that specifies the procedures, processes, and arrangements for the implementation of the ISRS Project. The ESM Framework, the SEP, LMP and ESCP shall form part of the OM.

3 Environmental and Social Policies, Regulations, and Laws

This section of the ESMF describes the relevant national environmental and social policies and regulations as well as the national environmental and social conventions/agreements/treaties relevant to the project as identified by the DepEd and DPWH. World Bank's Environmental and Social Framework (ESF) and ESSs relevant to the project are likewise identified and presented in parallel in Section 3.1 as an integrated guidance for ensuring compliance to the requirement of both the Philippine country systems and World Bank's. Section 3.2 presents in more detail the national environmental and social assessment and permitting requirements.

3.1 Overview of the World Bank's (WB) Environmental and Social Standards (ESS) and Relevant Philippine Laws and Regulations

The Project shall adopt relevant Environmental and Social Standards (ESSs) under the World Bank's Environmental and Social Framework (ESF). The ESF is designed to avoid, minimize, reduce, or mitigate adverse environmental and social risks and impacts. The Project will also comply with the Philippine environmental laws, standards, rules, and requirements.

Nine out of the ten Environmental and Social Standards (ESSs) in the ESF may be relevant to the different sub-projects across the country, subject to further validation as the exact location of the sub-projects are determined.

ESS1: Assessment and Management of Environmental and Social Risks and Impacts. ESS1 prescribes the responsibilities of the Borrower for the assessment, management, and monitoring of E&S risks and impacts associated with a project. The Philippine Environmental Impact Statement System (PEISS) (Presidential Decree 1586) and its implementing rules and regulations reflect the key elements of ESS1. The ESMF describes in detail the process of risk and impact assessment to be addressed in the preparation and implementation of the ESF instruments using available information and tools.

ESS2: Labor and Working Conditions. ESS2 promotes safety and health at work, fair treatment, non-discrimination, and equal opportunity for project workers. It also prescribes protection of vulnerable workers such as women, persons with disabilities, children (working age), and migrant workers, contracted workers, community workers, and primary supply workers. It also prohibits the use of all forms of forced labor and child labor and supports the principles of freedom of association and collective bargaining of project workers in a manner consistent with national law.

The Labor Code of Philippines promotes equal work opportunities regardless of sex, race or creed and regulates the relations between workers and employers. In addition, occupational health and safety (OHS) standards ensure safety and health at the workplace. The Department of Labor and Employment (DOLE) Department Order No. 198-2018 sets out the implementing rules and regulations of this Act. The Guidelines Governing Occupational Safety and Health in the Construction Industry is prescribed in DOLE Department Order No. 13, series of 1998. A Labor Management Procedures (LMP) has been prepared to align with ESS2.

ESS3: Resource Efficiency and Pollution Prevention and Management: ESS3 promotes the sustainable use of resources, including energy, water, and raw materials that integrate the principles of cleaner production. It also sets out the application of mitigation hierarchy that considers technically and financially feasible resource efficiency and pollution prevention measures that are proportional to the risks and impacts associated with the project and consistent with the Good International Industry Practice (GIIP) and Environmental Health and Safety Guidelines (EHSGs).

The Philippines have several comprehensive laws, regulations, and standards on managing resources, pollution and wastes. These laws and their implementing rules and regulations prescribe rational appropriation, utilization, exploitation, development, conservation and protection of resources. Policies and standards are also provided in these laws to prevent adverse project impacts on the environment and on people and safeguard the rights of affected communities. All applicable laws will be applied in the project to manage anticipated environmental and social risks and impacts. The project will support initiatives that promote clean technologies and innovations and pollution mitigating measures.

ESS4: Community Health and Safety: ESS4 addresses the health, safety, and security risks and impacts of project-affected communities. It sets out the requirements to anticipate and avoid adverse impacts on project-affected communities from both routine and non-routine circumstances. It also promotes quality and safety and requires considerations related to climate change in the design and construction of infrastructures; avoiding or minimizing community exposure of project-related traffic and road safety risks, diseases, and hazardous materials; and requires measures to address emergency events.

The government's environmental impact assessment requirement under the Philippine Environmental Impact Statement System (PEISS) (Presidential Decree 1586) and its implementing rules and regulations covers the assessment of the project impacts and risks on community health and safety and formulation of acceptable management plan. DOLE Department Order No. 13, series of 1998 likewise contains provisions on the protection and welfare of the general public within and around the immediate vicinity of any construction worksite.

ESS5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement: ESS5 aims to avoid involuntary resettlement or, when unavoidable, minimize involuntary resettlement by exploring project design alternatives and mitigation measures to manage unavoidable adverse social and economic impacts. It also strictly prohibits forced eviction and requires that any resettlement activities are properly planned and implemented with appropriate disclosure of information, meaningful consultation, and informed participation of those affected. ESS5 also covers temporary displacement which requires consulting the affected parties and coming up with alternative locations and or temporary arrangements.

ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources: ESS6 aims to protect and conserve biodiversity and habitats by applying mitigation hierarchy and the precautionary approach in the design and implementation of projects that could have an impact on biodiversity. It promotes the sustainable management of living natural resources and support livelihoods of local communities, including IPs, and inclusive economic development, through the adoption of practices that integrate conservation needs and development priorities. The applicability of ESS6 to specific sub-project shall be further assessed as soon as these are identified. This can be done by first determining if the sub-project location is within areas designated by the Philippine government as protected or within key Biodiversity Areas as defined under Republic Act (RA) 7586 as amended by RA 11038 on Biodiversity and Protected Area Management. Concerns on development Inclusivity local communities including IPs are also normally tackled as part of the requirements of Philippine EIS System.

ESS7: Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities: ESS7 is intended to ensure that the development process fosters full respect for human rights, dignity, aspirations, identity, culture, and natural resource-based livelihoods of IPs through promotion of sustainable development benefits and opportunities in a manner that is accessible, culturally appropriate, and inclusive. It also aims to avoid, minimize, mitigate, and/or compensate adverse impacts of projects on IPs. The applicability of ESS7 to specific sub-project shall be further assessed as soon as these are identified. This can be done by first determining if the sub-project location is within IP areas through the data base of the National Commission on Indigenous

Peoples (NCIP). The Indigenous Peoples Rights Act (IPRA) of 1997 is generally consistent with requirements of ESS7.

ESS8: Cultural Heritage: ESS8 aims to protect and preserve cultural heritage, in tangible and intangible forms, from adverse impacts of project activities. The assessment of the presence of cultural heritage is integral in the environmental and social assessment and is done through consultations with relevant stakeholders, review of regulations for managing cultural heritage, and inventories, maps and surveys of cultural resources.

The National Cultural Heritage Act of 2009 (RA 10066) is the principal law in the country that requires the protection, preservation, conservation, and promotion of cultural heritage, its property and histories, and ethnicity of local communities. Chance finds or other physical cultural resources are identified and preserved following the NCCA guidelines and RA 10066 rules and regulations. Furthermore, specific to school buildings, RA11194, otherwise known as “Gabaldon School Building Conservation Act” mandates the conservation of the Gabaldon School Buildings nationwide. The applicability of ESS8 to specific subprojects shall be further assessed as soon as these are identified. This can be done by first determining if the sub-project location is within or nearby areas declared by the government as cultural heritage sites. The ESMF provisions include a screening mechanisms to identify cultural heritage areas and Chance Find Procedures to be followed in line with the requirements of the ESS8.

ESS10: Stakeholder Engagement and Information Disclosure. ESS10 aims to establish stakeholder engagement as a continuing and iterative process that allows a project to identify, communicate, and facilitate dialogue with affected people. During project preparation, ESS10 requires the early identification of and consultation with affected and interested parties to gather their views and concerns for consideration in the project design, implementation, and operation. The standard also provides project-affected parties with accessible and inclusive means to raise issues and grievances and allow borrowers to respond to and manage grievances.

Overall, the Philippines have a comprehensive ES&S policy framework that corresponds with the core principles of the 10 ESS. While the requirements of an E&S assessment and consultations are well defined in the PEISS, there are other laws and regulations that supplement and complement the ESS. The PEISS, in itself, serves both as the planning and regulatory tool to enable projects to identify and mitigate impacts and risks while also recognizing the significant issues which fall entirely within the mandates of other laws or agencies which have jurisdiction and authority over a particular issue. The congruence of the Philippine policy framework to the ESF provides a strong legal platform for the application of the ESSs. There are, however, variances between the Philippines policy and legal framework and requirements of the ESF in terms of the operational/enabling policies.

The Table below provides a summary of the Worldbank ESS, the equivalent Philippine Laws and Regulation and some guidance notes of how the project can be made to comply with both.

Table 7: Summary of E&S Framework and Gaps between World Bank and Relevant Laws and Regulations in the Philippines

World Bank ESS	Relevant Philippine Laws and Regulations	Key Gaps	Gap Filling Measures
ESS1 - Assessment and Management of Environmental	Presidential Decree 1586 - Philippine Environmental Impact Statement System (EIA/ECC Law)	Difference in categorization of projects for purposes of determining proportionality in assessment and management of E&S Risks	ECC should be secured prior to implementing sub-projects covered by the requirement (> 10,000 sqm GFA). It should be secured early enough to be able to integrate

World Bank ESS	Relevant Philippine Laws and Regulations	Key Gaps	Gap Filling Measures
and Social Risks and Impacts	<p>DPWH Department Order No. 159 Series of 2022 Implementation of the Social and Environmental Management System Operation Manual</p> <p>Republic Act 9003 - Ecological Solid Wastes Management Act</p> <p>Republic Act 6969 - Toxic Chemicals & Hazardous Wastes Management Act</p> <p>Integrating project environmental and social impacts management measures in the project planning and design is a requirement under the NEDA ICC guidelines</p>	<p>Use of IEE Checklist (template) for projects categorized as low risk</p> <p>Projects that are less than 10,000 sqm gross floor area are not required to conduct EIA (most subprojects) nor secure ECC nor prepare an EMP under the Philippine EIS System</p> <p>Assessment of social project risks/impacts may not always be thorough as the mandate of the implementing agency, EMB-DENR is mainly on bio-physical environment</p> <p>The output of the EIA process under the Philippine EIS System is not adequately linked to a more legally binding instrument that explicitly requires as part of the project, the implementation of E&S Risk Management Measures</p> <p>NEDA relies of the Philippine EIS System for the identification of E&S impacts management measures</p>	<p>relevant conditions in the sub-project planning and design</p> <p>Appropriate Environmental and Social Risk Management should be implemented based on the application procedures and implementation arrangements as discussed in Chapters 5 to 7 to comply with both the WB ESS and relevant Philippine Laws and Regulations as enumerated in the 2nd column.</p> <p>- Require compliance with ESCOP_ (Annex 3) for low-risk sub-projects and preparation of ESMP for high-risk sub-projects</p>
ESS2 - Labor and Working Conditions	<ul style="list-style-type: none"> ● Labor Code of the Philippines (PD 442 as amended by RA 6715) ● Civil Service Law (PD 807) ● Occupational Safety and Health Standards Act (RA 11058) and DOLE DO 198-2018 ● Safe Spaces Act (PD 11313) ● Anti-Sexual Harassment Act of 1995 (RA 7877) ● RA 9231 (2003): Special Protection of Children Against Child Abuse, 	<p>No standards under the Philippine laws governing community workers</p> <p>The ES assessment under the Philippine EIS System does not delve much into working conditions, terms and conditions of employment, labor management procedures, non-discrimination and equal opportunity, forced labor, workers' organizations, grievance mechanism, and rights of workers, including</p>	<p>Appropriate Risk Management should be implemented based on the application procedures and implementation arrangements as discussed in Chapters 5 to 7 to comply with both the WB ESS and relevant Philippine Laws and Regulations as enumerated in the 2nd column</p> <ul style="list-style-type: none"> ● Require compliance with ESCOP_ (Annex 3) for low risk sub-projects and preparation of ESMP for high risk sub-projects

World Bank ESS	Relevant Philippine Laws and Regulations	Key Gaps	Gap Filling Measures
	<p>Exploitation and Discrimination Act</p> <ul style="list-style-type: none"> ● DO 130 Series 2016 Guidelines for the Implementation of the Provisions of RA 6685 and RA 9710 or Magna Carta for Women ● RA 9442 (Amending RA 7277) – Magna Carta for Disabled Persons ● R.A. 6725 (1989): An Act Strengthening the Prohibition on Discrimination against Women with Respect to Terms and Conditions of Employment, amending for this purpose article 135 of the Labor Code , as amended 	<p>the vulnerable sector, except with respect to manpower requirements and OHS</p>	
<p>ESS3 - Resource Efficiency and Pollution Prevention and Management</p>	<ul style="list-style-type: none"> ● RA 9513 Renewable Energy Act of 2008 ● RA 11285 – Energy Efficiency and Conservation Act of 2019 ● Philippine Green Building Code, as referral code of National Building Code (PD 1096) ● RA 8749 – Philippine Clean Air Act and DENR AO 2000-81 ● RA 9275 – Philippine Water Air Act and DENR Administrative Order 2016-08 ● PD 856 - Sanitation Code ● RA 9003 – Ecological Waste Management Act and DENR AO 2001-34 ● RA 6969 - Toxic Substances and Hazardous and Nuclear Wastes Control Act; and Chemical Control Order 	<p>The ES assessment under the Philippine EIS System does not delve much into parameters beyond bio-physical environment.</p> <p>As there are multiple mandated agencies implementing the various related laws, there is no project based ESMP requirement nor an integrated monitoring and evaluation mechanism that could cover this standard</p>	<ul style="list-style-type: none"> ● Appropriate Environmental Social Risk Management should be implemented based on the application procedures and implementation arrangements as discussed in Chapters 5 to 7 to comply with both the WB ESS and relevant Philippine Laws and Regulations as enumerated in the 2nd column ● The Environmental Codes of Practice (ECOP) and Environmental and Social Management Plan (ESMP) are developed to manage these anticipated environmental and social impacts of the Project

World Bank ESS	Relevant Philippine Laws and Regulations	Key Gaps	Gap Filling Measures
	<ul style="list-style-type: none"> on Asbestos (DENR AO 2000-02) ● Organic Agriculture Act (RA 10068) ● DA Administrative Order 09-2020 on ecologically sound and smart crop pest management 		
ESS4 - Community Health and Safety	<ul style="list-style-type: none"> ● BP 344 (Accessibility Law) ● Universal Design as defined in the UN Convention on the rights of PWDs ● DOH Administrative Order 2017-0010 Philippine National Standards for Drinking Water ● DOH AO 2014-0027 National Policy on Water Safety Plan ● RA 10121 Philippine Disaster Risk Reduction and Management (PDRRM) Act ● RA 10174 Climate Change Act of 2009 ● PD 1586 (1987) – Philippine EIS System and DENR AO 2003-30 ● Construction Safety Guidelines for the Implementation of Infrastructure Projects During the COVID-19 Public Health Crisis ● PD 1185 Fire Code of the Philippines ● Mines and Geosciences Bureau Memorandum Circular 2002-43 Engineering Geological Geohazard Assessment ● RA 7160 – Local Government Code 	<p>The ES assessment under the Philippine EIS System does not delve much into parameters beyond bio-physical environment</p> <p>Most of these related standards stipulated in various laws, enforced by multiple agencies are not linked to a project-based regulatory mechanism, hence, the preparation of relevant project plan is optional</p> <p>Insufficient/unavailable hazard maps/data especially in remote areas that could be used to integrate disaster risk management into the project planning and design. Also, there is lack of capability in integrating these considerations in project planning and design.</p>	<ul style="list-style-type: none"> ● A Construction Safety and Health Program (CSHP) have been developed as part of this ESMF. The functional upgrades in the buildings will also include provision of access for PWDs, WASH, and other related improvements that would help improve access and safety of the facilities. The design of the function upgrades will comply with the requirements of ESS4 and national regulations. ● Natural hazard / disaster risk identification shall be conducted for each sub-project. The results shall be integrated in the CSHP and used in the formulation of appropriate management plan to ensure community health and safety as part of the ESCOP or ESMP for sub-projects
ESS5 - Land Acquisition, Restrictions on	<ul style="list-style-type: none"> ● PD 1529 Property Registration Decree 	Many of the school sites are donated but do not have appropriate legal documents.	(In this Project, subprojects involving project-related land acquisition or restrictions on land

World Bank ESS	Relevant Philippine Laws and Regulations	Key Gaps	Gap Filling Measures
Land Use and Involuntary Resettlement	<ul style="list-style-type: none"> ● RA 10752 (2016)-Right of Way Act ● RA 7279 (1992)-Urban development and Housing Act ● RA 8371 (1997)- Indigenous Peoples’ Rights Act (IPRA), ● RA 7160 (1991)- Local Government Code ● RA 11038- Expanded National Integrated Protected Area System (e-NIPAS) ● RA 9147 (2001) - Wildlife Resources Conservation Act ● PD 70524 – Revised Forestry Code of the Philippines 	<p>Most of the sub-projects are not required to undergo ES assessment under the Philippine EIS system (as most are less than 10,000 sqm. GFA), where restrictions on land use and involuntary resettlement are usually examined</p> <p>Limited knowledge on the location of areas with certain restrictions (e.g. IP Areas, NIPAS/Protected areas, etc.)</p>	<p>use will be excluded. No land acquisition or resettlement impacts are expected but temporary displacement or disruptions to their operations are anticipated).</p> <p>School site must be owned by the DepEd thru acceptable forms of site ownership such as Deed of Donation, Tax Declaration, Deed of Usufruct. Ownerships in the form of Ancestral Domain and those schools site located in protected areas shall sought necessary clearances from concerned regulatory bodies or agencies. Further, roper agreement with the asset owners such as the use of available temporary/ alternate facilities or learning spaces, shifting of classes or scheduling construction activities during nighttime or weekends or school breaks can minimize disruptions and will be assured by the project proponent. These mitigation measures are outlined in the ESMP.</p> <p>Location of areas with restrictions near the sub-project area shall be identified and considered the ESMP for subprojects including the construction access plans.</p>
ESS6 - Biodiversity Conservation and Sustainable Management of Living Natural Resources	<ul style="list-style-type: none"> ● RA 11038 Expanded National Integrated Protected Areas System (e-NIPAS) Act ● Wildlife Resources and Conservation and Protection Act of 2001 (RA 9147) 	<p>Most of the sub-projects are not required to undergo ES under the Philippine EIS where the relevance of biodiversity conservation & sustainable management of living resources is assessed, as most are less than 10,000 sqm. GFA</p> <p>Limited knowledge on the location of protected/ restricted areas under these laws</p>	<p>The applicability of this ESS to specific sub-projects shall be validated as soon as the location of the schools to be included are identified. If the identified schools are within or nearby protected areas (PA), designated forest lands, national parks, or marine sanctuaries, relevant regulations and requirements should be complied to prevent adverse impacts on these such as impacts related to transport of construction materials.</p>

World Bank ESS	Relevant Philippine Laws and Regulations	Key Gaps	Gap Filling Measures
		<p>The concept of no net loss, net gain is not applied in the existing policy and regulatory framework</p> <p>Limited application of cumulative impact assessment on habitats and biodiversity, mitigation hierarchy and payment of development fees based on adverse impact potential of the project</p>	<p>To prevent encroachment on forests, natural parks, and protected areas, the ESMF provides a screening mechanism for proposed activities to exclude activities that involve significant conversion or degradation of PAs and other natural habitats. Subprojects near protected areas shall prepare an ESMP which integrates appropriate management plan.</p>
<p>ESS7 - Indigenous People/Sub-Saharan African Historically Underserved Traditional Local Communities</p>	<ul style="list-style-type: none"> ● IPRA (RA 8371) ● RA 11054 of 2018 known as the "Organic Law for the Bangsamoro Autonomous Region in Muslim Mindanao" <ul style="list-style-type: none"> ● DepEd DO 62 s. 2011 – Adopting the National Indigenous People Education Framework 	<p>No explicit requirement on IP Framework or Plan to ensure that impacts of the project are periodically assessed throughout the project implementation</p>	<p>The applicability of this ESS to specific sub-projects shall be validated as soon as the location of the schools to be included are identified. Subprojects located in Ancestral Domains (AD) of IPs or sites with known IPs must implement equal and culturally appropriate access to benefits and IPs should be adequately consulted during decision making. The Indigenous Peoples Rights Act (IPRA) of 1997 is generally consistent with requirements of ESS7. The law contains elements of fostering full respect for the rights, dignity, aspirations, identity, culture, and natural resource-based livelihoods of IPs as well as mechanisms for development initiatives to avoid adverse impacts of projects on IPs, or when avoidance is not possible, to minimize, mitigate and/or compensate for such impacts. These are further discussed in Chapter 5.</p>
<p>ESS8 - Cultural Heritage</p>	<ul style="list-style-type: none"> ● RA 10066 Philippine Cultural Heritage Act, 2009 	<p>Lack of conservation management plan for cultural heritage</p> <p>Requirement for contractors to observe globally recognized practices</p>	<p>Although Gabaldon school buildings will be excluded from the project, the E&S screening will ensure that any physical cultural resources are identified. The ESMF has included a Chance Find Procedures which requires identification and preservation of any areas of potential cultural importance or artifacts based on the National Commission for</p>

World Bank ESS	Relevant Philippine Laws and Regulations	Key Gaps	Gap Filling Measures
			Culture and the Arts (NCCA) guidelines and rules under RA 10066.
ESS10 - Stakeholder Engagement and Information Disclosure	<ul style="list-style-type: none"> Local Government Code of 1991 Urban Development and Housing Act of 1992 (RA 7279) (PD 1586 (1987) – Philippine EIS System DENR AO 2017-15) 	<p>Stakeholder engagement in E&S risk assessment and management usually rely on the Philippine EIS system procedures. However, most of the sub-projects are not required to undergo ES under the Philippine EIS system as most are less than 10,000 sqm. GFA</p> <p>Under the Philippine EIS System, stakeholder engagement/ participation is commonly not required for projects requiring only an IEE Checklist for ECC application</p>	ESS10 applies to the Project. A SEP has been prepared to identify the project stakeholders who will either benefit or be adversely affected as well as key individuals/groups that are involved in various parts of the value chain or component/activities of the project. It also includes engagement strategies particularly for vulnerable and disadvantaged groups and individuals. The SEP also provides guidance in the conduct of public participation through open and participatory consultations with communities and affected persons.

3.2 National Environmental and Social Assessment and Permitting

The Philippine government requires projects with significant impacts to secure an Environmental Compliance Certificate (ECC) from the Environmental Management Bureau (EMB) of the Department of Environment and Natural Resources (DENR) prior to project implementation. As a requirement for the ECC application, project proponents must conduct a formal environmental assessment, the assessment scale and the type of report requirement depend on the project's scale/size. Environmentally Critical Projects (ECPs) or projects to be located in an Environmentally Critical Area (ECA) are defined by law as those required to secure ECC. Repair, rehabilitation, retrofitting, reconstruction and site improvement under the ISRS Project are not classified as ECP but may be required to secure an ECC if located in ECA⁴ and greater than 10,000 sqm (or 1 ha gross floor area including open spaces).

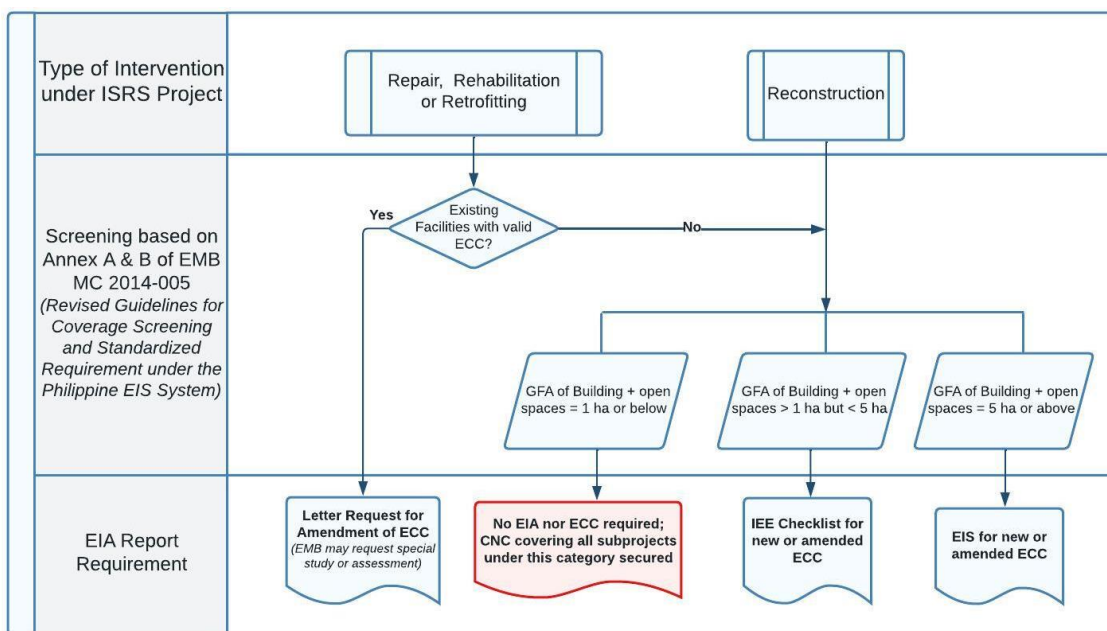
As the sub-projects involve the improvement of existing school infrastructure, it has to be determined whether the existing facilities are covered by a valid ECC. Existing facilities to be subjected to repair, rehabilitation, retrofitting and reconstruction that are covered by a valid ECC are only required to submit an ECC amendment letter request together with a description of the intervention based on Annex B for the Revised Coverage Screening Guidelines (EMB MC 2014-005) under the Philippine EIS System.

Most of the subprojects are not expected to exceed 10,000 sqm and therefore, are not required to conduct an EIA and secure an ECC nor a Certificate of Non-Coverage (CNC) under the current regulations of the Philippine EIS System. However, existing facilities for the selected subprojects that are greater than 10,000 sq.m and without valid ECC and has to either submit an Initial Environmental Examination (IEE) Checklist Report (if >10,000

⁴ because of the complexity of the technical definition of ECA as provided in Presidential Proclamation 2146 and the absence of official reference ECA map or data, the entire country is often assumed to be ECA for purposes of coverage screening under the Philippine EIS System

sqm but <50,000 sqm) or Environmental Impact Statement⁵ (EIS) (≥50,000 sqm) for an ECC application. These thresholds are also applicable for reconstruction sub-projects regardless of whether there is valid ECC or not. Site improvement (standalone) may be considered as an environmental enhancement project which is exempted from the ECC requirement. Figure 3 illustrates the process that can be applied in screening the level of coverage or non-coverage of sub-projects for environmental assessment/ECC requirement of the Philippine government.

Figure 3: Coverage Screening Process for Environmental Assessment Requirement under the Philippine EIS System



The review and approval process for the ECC and amendment application for these types of applications is with the EMB Regional Office having jurisdiction over the project location.

The ESMF, ESMP and the ESCP to be prepared can be attached to the letter request ECC Amendment as an assurance that environmental and social risks will be adequately managed even if it did not undergo the assessment process requirement of the government.

Other environmental and social risk management- related permits that are relevant to the project are described as follows. These requirements are mandatory and shall be followed or secured by the project.

Table 8: Relevant E&S Permits

Permitting Agencies	Nature of Permits	Review and Approval Process	Checklist and Forms
Department of Environment and Natural Resources	Permit to Cut (trees), as applicable	DENR Regional Office concerned	DENR Website
Department of Labor and Employment	Construction Safety and Health Program	DOLE	

⁵ based on the guidelines, an Environmental Performance Report and Management Plan (EPRMP) is the requirement for project modification but this requires environmental performance records which is probably not be available for most facilities

Permitting Agencies	Nature of Permits	Review and Approval Process	Checklist and Forms
Local Government Units	Building Permits Occupancy Permits Sanitary Permit	LGU having jurisdiction over the project site	
EMB-DENR Regional Office or Laguna Lake Development Authority (LLDA)	Discharge Permit (as needed)	EMB-DENR Regional Office having jurisdiction over the project site	
EMB-DENR Regional Office	Permit to Operate for generator sets	EMB-DENR Regional Office having jurisdiction over the project site	
National Water Resources Board (NWRB)	Water Permit for extraction of surface or groundwater	NWRB	

4 Environmental and Social Baseline

4.1 Baseline Condition of School Facilities

The Philippines has a total of 47,382 public schools with 327,794 school buildings. Based on the NSBI 2021 and 2022, only around 30 percent are in good condition. Around 60 percent of the buildings require intervention (i.e., minor or major repair) and 9 percent are programmed for condemnation or have already been condemned. In terms of regional distribution, the regions with the largest need for intervention (i.e., having equal or higher percentage than the regional average) include Region II (70%), Region V (70%), Region VI (75%), Region VII (74%), Region VIII (71%), Region X (76%), CARAGA (75%), BARMM (79%). Moreover, the DepEd estimates that around 170,000 additional classrooms are needed to meet the increasing student population⁶.

Table 9: Physical Condition of School-buildings, By Region

Regions	Schools	Ongoing Construction*	Good Condition	Needs Minor Repair	Needs major Repair	Condemned*	School Buildings	Share of School Buildings Needing Intervention
CAR	1,833	75	2,658	1,567	2,919	934	8,153	66%
Region I	2,865	93	7,420	6,004	6,208	1,885	21,610	65%
Region II	2,547	205	5,265	5,327	5,735	1,817	18,349	70%
Region III	3,718	192	13,260	7,483	6,705	3,003	30,643	56%
Region IV-A	3,545	220	9,407	8,473	7,575	3,503	29,178	67%
Region IV-B	2,348	170	4,998	5,793	4,238	857	16,056	68%
Region V	3,859	88	8,686	10,322	7,982	2,075	29,153	70%
Region VI	4,041	219	8,237	11,581	11,417	1,767	33,221	75%
Region VII	3,736	240	6,173	8,600	7,374	1,954	24,341	74%
Region VIII	4,172	139	6,759	9,368	6,363	1,201	23,830	71%
Region IX	2,557	134	4,715	4,487	4,651	1,367	15,354	68%
Region X	2,524	148	4,056	4,518	5,559	3,478	17,759	76%
Region XI	2,176	166	5,137	4,812	4,563	2,006	16,684	68%
Region XII	2,074	98	4,767	4,807	4,165	1,583	15,420	68%
CARAGA	2,090	117	3,227	4,215	4,840	1,099	13,498	75%
BARMM	2,473	218	1,932	4,080	3,453	626	10,309	79%
NCR	824	73	2,279	1,036	645	203	4,236	44%
Total	47,382	2,595	98,976	102,47	94,392	29,358	327,794	66%
Share		0.8%	30.2%	31.3%	28.8%	9.0%	100.0%	

Notes: *including those for completion ** including those programmed for condemnation

Source: National School Building Inventory 2021-2022

On average, around 70 percent of schools buildings need intervention (minor repair, major repair, and reconstruction), excluding the National Capital Region or Metro *Manila*. The regions with the largest need for intervention (i.e., having equal or higher percentage than the regional average) include Region II (70%), Region V (70%), Region VI (75%), Region VII (74%), Region VIII (71%), Region X (76%), CARAGA (75%), BARMM (79%).

The high exposure and vulnerability of school infrastructure resulted in significant actual damages, exacerbating the already serious school infrastructure deficit, making learners highly exposed to unsafe learning environment,

⁶ DepEd Project Proposal – Infrastructure for Safer and Resilient school Projects. Technical Analysis

and repeatedly experiencing class disruptions. A large number of school infrastructures have been destroyed by geological and climate-related adverse events, including typhoons, floods, earthquakes, and landslides. DepEd data shows that there is an increasing trend in the number of schools affected by various hazard events every year and the damages were uneven across the country. However, the largest impacts were mostly due to earthquake events or hydrometeorological events. Typhoons Karding (2022) and Odette (2021) most significantly impacted CARAGA, Central Luzon, MIMAROPA, Western Visayas, Central Visayas, and Eastern Visayas, while Abra Earthquakes (2022) and Davao Earthquake (2021) mostly affected Cordillera Administrative Region (CAR), Ilocos, Cagayan Valley, Central Luzon, and Davao regions.

As a result of the recurring disasters, over one million students learn in Temporary Learning Spaces (TLS), makeshift schools, or other informal spaces like under trees. The TLS solutions, which currently do not include water, sanitation, and hygiene (WASH) modules, are intended for only short-term, six-month use, but are often used for up to three years. This means that children are learning in inadequate conditions for prolonged periods. There are also challenges for schools that remain operational in the disaster-affected areas as these are often used as evacuation centers. DepEd’s data show that, as of 2019, around 11,600 schools were used as evacuation centers nationwide. During this period, more than 27,000 school days were lost due to the use of schools as evacuation centers (data on 4,000 schools). Moreover, over 100,000 school days were lost due to the closure of schools as a result of disasters.

While improvements have been made in terms of the provision of basic services in schools, efforts are still needed to improve and provide gender-segregated facilities. As of 2021, 92 percent of public schools have access to electricity, and in terms of WASH facilities, the facility-to-pupil ratio targets set by DepEd were achieved: primary school (K to 6) had a ratio of 1:25 that surpassed the target of 1:30, in secondary level (JHS and SHS) had ratios of 1:30 and 1:39 respectively, surpassing the target of 1:40.17 Only 49 percent of elementary schools had gender-segregated sanitation facilities in 2019, while DepEd’s target for 2030 is 100 percent

4.2 Environmental Baseline

4.2.1 Exposure to Natural Hazards

The country’s school infrastructure is highly exposed and vulnerable to the disruptive impact of geological and climate-related hazard events. As a result, the education system must frequently cope with a growing number of affected learners and teachers, loss of classrooms, economic losses, and long periods of education service downtime.

Earthquake Hazards. In terms of exposure to strong motion of the ground in potentially destructive earthquakes, according to estimates by the GeoRiskPH platform of the Department of Science and Technology (DOST) - Philippine Institute of Volcanology and Seismology (PHIVOLCS), of the 47,382 schools in the NSBI, around 95 percent may experience peak ground accelerations (PGAs) in the range of 0.3g-0.5g or 0.4g in the median where 0.4g or 40% of gravitational acceleration is typically the value considered in structural design. Only two regions (Region IV-B and BARMM) out of the 17 regions may be slightly less exposed to such earthquake hazards.

Table 10: Exposure of School Facilities to Earthquake Hazards, By Region

Earthquake PGA 500YRP	0.1g	0.2g	0.3g	0.4g	0.5g	0.6g	Total
CAR	3	2		1,453	375		1,833
Region I	8	2	112	1,971	772		2,865
Region II	8	1	221	2,220	97		2,547

Earthquake PGA 500YRP	0.1g	0.2g	0.3g	0.4g	0.5g	0.6g	Total
Region III	15	6	2,767	844	82	4	3,718
Region IV-A	10	5	2,265	1,098	167		3,545
Region IV-B	917	67	548	548	268		2,348
Region V	8	87	1,267	1,166	29		2,557
Region VI	3	3	842	2,321	663	27	3,859
Region VII	6	114	2,335	1,462	124		4,041
Region VIII	12	6	2,264	1,303	151		3,736
Region IX	15	1	474	3,100	582		4,172
Region X	11	3	2,312	196	2		2,524
Region XI	1		310	1,317	548		2,176
Region XII	16		617	1,146	295		2,074
CARAGA	17	2	20	924	1,127		2,090
BARMM	724	193	358	1,081	117		2,473
NCR	5		234	520	65		824
Total	1,779	492	16,946	22,670	5,464	31	47,382
Share	3.8%	1.0%	35.8%	47.8%	11.5%	0.1%	100.0%

Source: National School Building Inventory 2021-2022 and DOST-GeoriskPH

Wind Hazards. DOST GeoRiskPH platform estimates that about 45 percent of the 47,832 schools in the NSBI may experience during typhoons such basic wind speeds as in the range of 220-270 kph, and another 25 percent may experience even faster winds. The exposure is significantly higher than average in the Pacific-side eastern seaboard regions of the country.

Table 11: Exposure of School Facilities to Wind Hazards, By Region

Basic Wind Speed, KPH 500YRP	120.1 - 170	170.1 - 220	220.1 - 270	> 270	ND	Total
CAR			1,080	745	8	1,833
Region I			2,683	157	25	2,865
Region II			115	2,417	15	2,547
Region III			3,435	249	34	3,718
Region IV-A			3,264	246	35	3,545
Region IV-B		719	1,570	1	58	2,348
Region V	62	2,461	4	1	29	2,557
Region VI		1	362	3,442	54	3,859
Region VII			3,996	2	43	4,041
Region VIII	1	2	3,668	4	61	3,736
Region IX			3	4,107	62	4,172
Region X		2,430	71		23	2,524
Region XI	771	1,386	1		18	2,176
Region XII	1,495	552	3	2	22	2,074
CARAGA		1,025	664	358	43	2,090
BARMM	1,180	1,121	6	3	163	2,473
NCR			812	1	11	824
Total	3,509	9,697	21,737	11,735	704	47,382
Share	7.4%	20.5%	45.9%	24.8%	1.5%	100.0%

Source: National School Building Inventory 2021-2022 and DOST-GeoriskPH

Flood Hazards. When it comes to flood hazard, the DOST GeoRiskPH estimates that about 27 percent of the public schools in the country have either moderate, high or very high susceptibility to flood. Around 73 percent have either low or nonsignificant flood susceptibility.

Table 12: Exposure of School Facilities to Flood Hazards, By Region

Level of Susceptibility	Not Susceptible	Low	Moderate	High	Very High	Total
CAR			1,080	745	8	1,833
Region I			2,683	157	25	2,865
Region II			115	2,417	15	2,547
Region III			3,435	249	34	3,718
Region IV-A			3,264	246	35	3,545
Region IV-B		719	1,570	1	58	2,348
Region V	62	2,461	4	1	29	2,557
Region VI		1	362	3,442	54	3,859
Region VII			3,996	2	43	4,041
Region VIII	1	2	3,668	4	61	3,736
Region IX			3	4,107	62	4,172
Region X		2,430	71		23	2,524
Region XI	771	1,386	1		18	2,176
Region XII	1,495	552	3	2	22	2,074
CARAGA		1,025	664	358	43	2,090
BARMM	1,180	1,121	6	3	163	2,473
NCR			812	1	11	824
Total	28,170	6,227	5,725	5,313	1,947	47,382
Share	59.5%	13.1%	12.1%	11.2%	4.1%	100.0%

Source: National School Building Inventory 2021-2022 and DOST-GeoriskPH

4.2.2 Observed Climate Trends and Projected Climate Change⁷

Key observations and climate projections derived from state-of-the-art climate models using information from updated future climate scenarios in terms of temperature, rainfall, tropical cyclone and sea level rise are summarized below.

Temperature. Observed temperature in the Philippines is warming at an average rate of 0.1°C/decade. Climate projections suggest continuous warming in the future. It is projected that the country-averaged mean temperature could increase by as much as 0.90°C to 1.9°C (assuming moderate emission scenario) and 1.2°C to 2.3°C (considering the high emission scenario) in the mid-21st century (2036-2065). Warmer conditions are further expected by the end of the 21st century (2070-2099), which could range from 1.3°C to 2.5°C (moderate emission scenario) to 2.5°C to 4.1°C (high emission scenario) increase in mean temperature relative to the baseline climate.

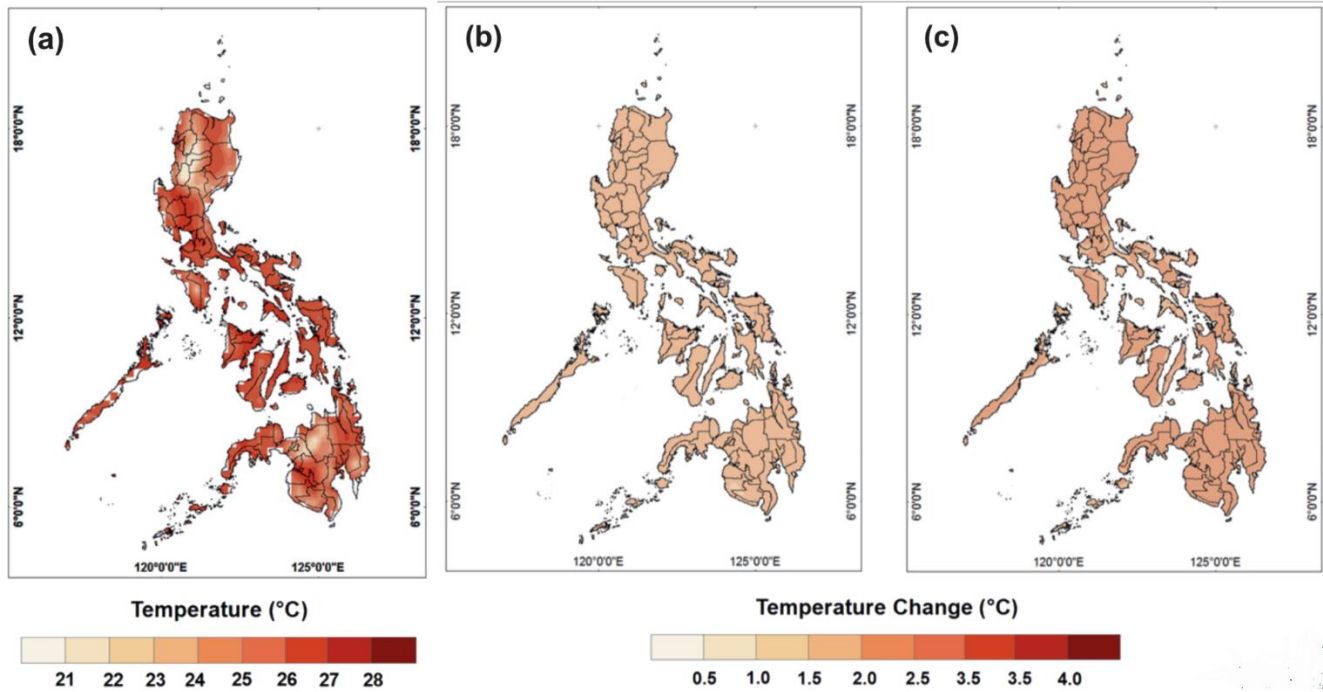
The spatial distribution of observed annual mean temperature is shown in Figure 4. Most areas in the country have observed an annual average temperature from 1971-2000 exceeding 26°C. Slightly cooler areas are found

⁷ DOST-PAGASA, 2018: Observed and Projected Climate Change in the Philippines. Philippine Atmospheric, Geophysical and Astronomical Services Administration, Quezon City, Philippines

in mountainous regions. These temperatures are projected to increase uniformly and minimally across the country in both moderate emission and high emission scenarios.

Figure 4: Spatial distribution of Annual Average Temperature & Projected Temperature Changes

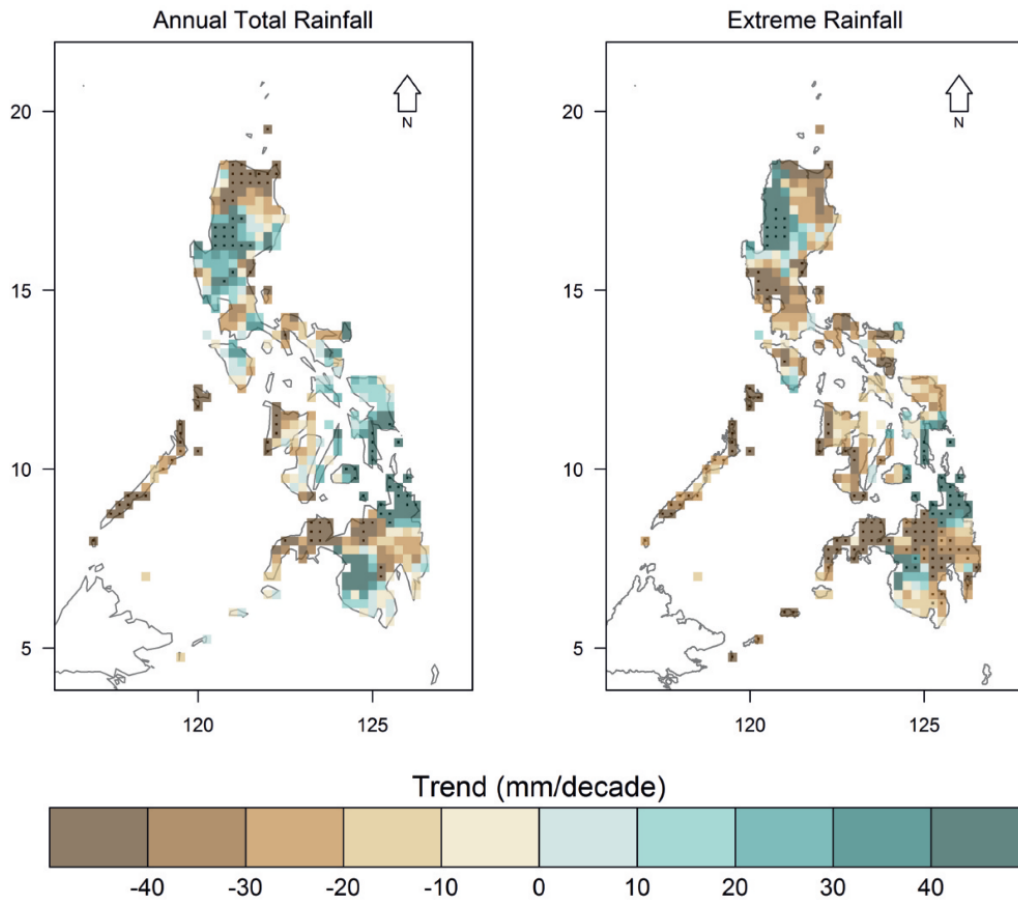
- (a) observed annual average temperature for 1971-2000
- projected temperature changes for the mid-21st century (2036-2065) at (b) moderate emission scenario and (c) High emission scenario relative to the baseline period



Source: Asian Precipitation-Highly Resolved Observational Data Integration Towards Evaluation (APHRODITE) Project.

Rainfall. Increasing trends in annual and seasonal rainfall were observed in many parts of the country. Such trends were found to be associated with extreme rainfall events. Multi-model projections suggest a range of increase and decrease in seasonal mean rainfall exceeding 40% of its historical values. Nevertheless, the multi-model central estimate of projected changes in rainfall could be within the natural rainfall variations, except for the projected rainfall reduction over central sections of Mindanao that are beyond the observed rainfall variations in the past. Changes in rainfall over the Philippines have been found to vary spatially as shown in figure 5. From 1951 to 2010, the annual total rainfall over northern sections of Luzon, Palawan, Western sections of Visayas, and central and western sections of Mindanao have declined while increasing trends have been observed in other areas, notable the central parts of Luzon, eastern section of Visayas and the northeastern and southwestern sections of Mindanao at a rate ranging from 10mm/decade to as much as a rate exceeding 40mm/decade. Such trends in annual total rainfall events are associated with extreme rainfall events.

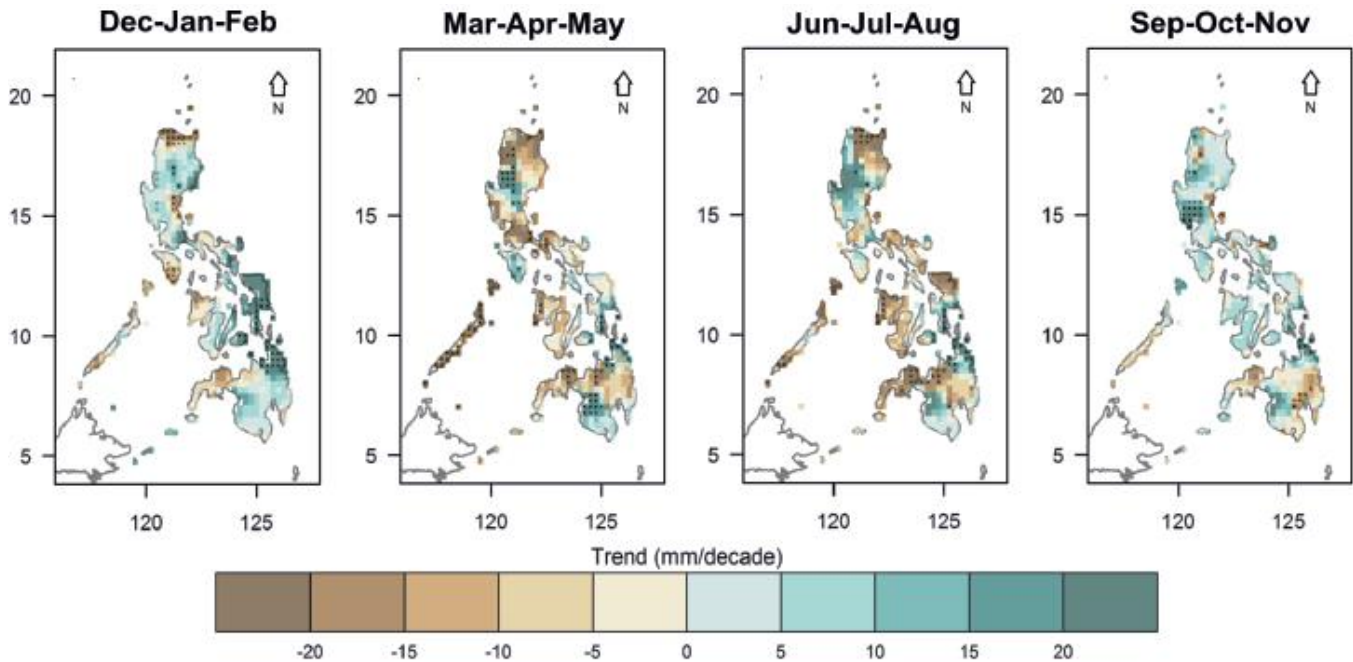
Figure 5: Observed trends in annual total rainfall in the Philippines during the period from 1951 to 2010



Extreme Rainfall is defined as the annual total rainfall taken from those days that exceeded 95th percentile of rainfall on wet days in the 1971-2000 baseline period

Rainfall in the Philippines is not only spatially variable but also highly seasonal. Figure 6 shows the trends in seasonal total rainfall. Increasing trend in rainfall is observed pronouncedly over the northeastern section of Mindanao and eastern portions of Visayas in December-January-February coinciding to the northeast monsoon season. Note that the northeast monsoon season coincides with also to the wet season over those areas implying an increased risk of flooding potential on parts of the areas mentioned. Increasing trends in rainfall are also observed over central portions of Luzon and northeastern sections of Mindanao in March-April-May season. In the following seasons of June-July-August and September-October-November, similar patterns of increasing rainfall trends are observed over the Ilocos Region, and northeastern and southern parts of Mindanao, while decreasing trend is apparent in most part of the country. A noticeable drying trend can be observed over the northeastern portion of Luzon and in central and northwestern sections of Mindanao in almost all seasons.

Figure 6: Observed trends in seasonal total rainfall in the Philippines from 1951 to 2010

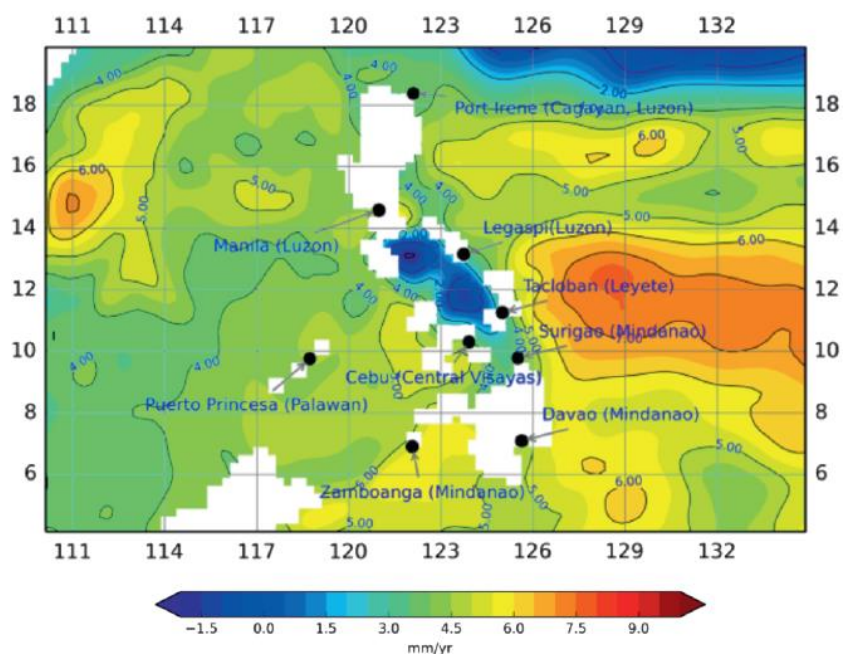


Tropical Cyclone. Three of the models suggest that decrease in tropical cyclone frequency is significant while two others suggest that no change is expected. In terms of the TC intensity, four of the models agree in a projected increase, two of which are significant. A caveat in the projections is that, not all possible contributing factors in the development and behavior of TCs were considered.

Sea Level Rise. Based on satellite observations (AVISO altimetry data) taken from 1993 to 2015, the sea level has risen by as much as 5.7 to 7.0 mm/year over the Philippine Sea (Figure 7). Such rate is approximately double the highest global average rate of 2.8-3.6 mm/yr, which was observed between 1993 to 2010.

Looking closely at the different coastal areas in the country, a rate of sea level rise as high as 4.5-5.0 mm/yr, is east of the islands of Leyte and Samar, and along the southwestern coasts of Central and Western Visayas and east of Mindanao and south of Zamboanga (Figure 9).

Figure 7: Sea Level Change in the Philippines for 1993-2015



More detailed discussions on the projection including specific data for the different provinces are in PAGASA's publications on "Observed and Projected Climate Change in the Philippines" and "Philippine Climate Extremes Report (with Annexes)".

4.2.3 Environmental Baseline by Region

The project will provide support to all 16 regions of the country (except The National Capital Region, NCR as it is covered in another World Bank supported project which is the Philippine Seismic Risk Reduction and Resilient Project, PSRRRP). The following is a brief description of the environmental baseline for the 16 regions.

4.2.3.1 Cordillera Administrative Region (CAR)

The Cordillera Administrative Region (CAR) was established on July 15, 1987, through executive Order No. 220 issued by President Corazon Aquino. The region consists of the provinces of Abra, Apayao, Benguet, Ifugao, Kalinga, Mountain Province and Apayao. The regional center is the Chartered City of Baguio, officially known as the Summer Capital of the Philippines. Its rugged terrain and breath-taking topography have been home to the sturdy and industrious indigenous tribes collectively called the Igorot, while its climate has bred an equally unique culture distinct from that of the country's lowland colonized regions.

It is located in the North-Central part of Luzon and encompasses most of the areas within the Cordillera Central Mountain range of Luzon. It is bounded by Ilocos Norte and Cagayan in the North, Pangasinan and Nueva Vizcaya in the South, Cagayan Valley in the East, and the Ilocos Region in the West. It has a mountainous topography and dubbed as the "Watershed Cradle of North Luzon" as it hosts nine major rivers that provide continuous water for irrigation and energy for Northern Luzon.

The region is rich in natural resources and has abundant mineral reserves. Gold, copper, silver, and zinc are among the metallic ores that can be found in the region. Non-metallic reserves include sand, gravel, and sulfur.

Although mineral reserves are found all over the region, mining is concentrated in Benguet. The majority of Cordillera's population engage in farming and small-scale production.

Cordillera Administrative Region (CAR) is rich in ancient culture. It is the home of the indigenous tribe called the Igorot. The way of life of the people in this region existed way back to ancient Filipinos before the Spanish colonization. Cordillera also has various festivals; these include the Panagbenga or Baguio Flower Festival celebrated every February. The festival highlights are the flower exhibits, garden tours, floral competition, and parade of floats. Other festivals in the region include the Ulalim Festival in Kalinga, Lang-ay Festival in Mountain Province, Banaue Imbayah Festival, and the Tabuk Matagoan Festival.

Cordillera is one of the prime tourist destinations in the Philippines. It has many spectacular scenic views and enchantingly cool places. The world-famous Banaue Rice Terraces in the province of Ifugao is considered as the "Eighth Wonder of the World". This structure of about 2000 to 6000 years old is a United Nations Organization for Education, Science and Culture (UNESCO) World Heritage Site. Other tourist attractions of the region include the Sumaguing Cave in Sagada and the mummy caves in Benguet and Mt. Province. There are four National Parks in the region: Cassamata Hill; Mount Pulag, which is the highest mountain in Luzon; Mount Data; and Balbalasang-Balbalan.

The Cordillera covers an area of approximately 18,294 square kilometers. It is composed of 73 municipalities, two cities, seven congressional districts, and 1,176 barangays (source- <https://www.dti.gov.ph/regions/car/profile/>).

4.2.3.2 Region 1 (Ilocos Region)

The Ilocos Region or Region I is located in the northwestern region portion of Luzon. It is bounded by the Cordillera Administrative Region and Cagayan Valley to the east, Central Luzon to the south and by the South China Sea to the west.

The province of Pangasinan composes 58% of the region's population, 42% of its area and 61% of its economy.

The region is composed of four provinces, namely: Ilocos Norte, Ilocos Sur, La Union and Pangasinan. Its regional center is San Fernando City, La Union. The Ilocano speaking people compose 66% of the region, the Pangasinan speaking people compose 27%, and the Tagalogs compose 3%. Region I occupies the narrow plain between the Cordillera Central mountain range and the South China Sea. It also occupies the northern portion of the Central Luzon plain, to the north-east of the Zambales Mountains.

Region I is drained by 29 river systems, aside from small mountain streams that sometimes swell up to three times their sizes during the rainy season. These rivers are valuable irrigation source (source - <https://www.dti.gov.ph/regions/region1/profile/>).

The Agno River basin, with an area of 5,952 sq. km., is the third largest river in Luzon, wherein its watershed includes the Pangasinan plain and extends up to the mountainous areas of Mountain Province and Benguet. Agno River drains into the Lingayen Gulf. The Amburayan River basin is also one of the biggest, covering about 1,386 sq. km. in some parts of Ilocos Sur, La Union and Benguet. The Laoag River basin covers an area of 1,319 sq. km. Region I have an extensive coastline and its seacoasts are intended with bays and gulf. Its discontinuous coastline has a physical length of 708.165 kilometers, of which 150.18 km. are stretched in Ilocos Norte, 157.63 km. stretched along Ilocos Sur, while 114.70 kms. in La Union and 285.66 kilometers stretched in Pangasinan. Pangasinan shares the longest coastline with about 40.34 percent while La Union the least with only 16.2 percent.

The region's total length of coastlines constitutes only about 2.08 percent of the total length of coastlines in the Philippines (<https://r1.denr.gov.ph/index.php/about-us/regional-profile>).

4.2.3.3 Region 2 (Cagayan Valley Region)

Region 2 or the Cagayan Valley region is strategically located on the northeastern part of mainland Luzon. It is bounded by three mountain ranges: the Sierra Madre Mountains in the East, the Cordillera Mountains in the West, and the Caraballo Mountains in the South.

The region consists of five provinces: the valley provinces of Cagayan and Isabela, the mountain provinces of Quirino and Nueva Vizcaya, and the island province of Batanes; with 89 municipalities, four cities and 2,311 barangays. It has 10 congressional districts. Cagayan Valley has a total land area of over 2.6 million hectares which consists of more than 900 thousand hectares of alienable and disposable land and over 1.7 hectares of forest land with a forest cover of more than 1 million hectares, the largest forest cover in the Philippines. Rich in coastal resources, Region 2 has 5,640 hectares of mangrove, 15,437 hectares corals and 4,089 hectares of seagrasses. It is the fourth largest region of the country accounting for about nine percent of the national land area.

It has 14 nationally proclaimed protected areas covering 997,466 hectares: Batanes Protected Landscape and Seascape; Peñablanca Protected Landscape and Seascape, Magapit Protected Landscape, Palaui Island Protected Landscape and Seascape, Baua Watershed Forest Reserve and Wangag Watershed Forest Reserve in Cagayan; Tumauni Watershed Natural Park, Fuyot Spring National Park and Northern Sierra Madre Natural Park in Isabela; Salinas Natural Monument, Dupax Watershed Forest Reserve, Casecnan Protected Landscape and Bangan Hill National Park in Nueva Vizcaya; and Quirino Protected Landscape.

The Valley is dissected by the Cagayan River, the longest river and largest basin in the country. It has a total stretch of about 520 kilometers from its source in Kasibu, Nueva Vizcaya down to its mouth in Aparri, Cagayan. It has a drainage area of almost 2.8 million hectares that extends to the Cordillera Administrative Region.

4.2.3.4 Region 3 (Central Luzon)

Central Luzon is a combination of towering mountains, extinct and active volcanoes, lush, verdant farmlands, and natural sea harbors. It is one of the leading growth regions in the Philippines, strategically located at the heart of Asia. Region III lies between Manila and Northern Luzon. It is composed of seven provinces, twelve cities and 118 municipalities. Its 7 provinces are Aurora, Bataan, Bulacan, Nueva Ecija, Pampanga, Tarlac and Zambales. Its 12 cities are Balanga from Bataan; Malolos and San Jose del Monte from Bulacan; Cabanatuan, Gapan, Muñoz, Palayan and San Jose from Nueva Ecija; Angeles and San Fernando from Pampanga, Tarlac from Tarlac; and Olongapo from Zambales.

It includes all land area north of Manila Bay from the tip of Bataan peninsula on the west, and all the lands north of the Caraballo mountains on the east. It is the longest contiguous area of the lowlands and is otherwise known as the Central Plains of Luzon. The region produces one third of the country's total rice production, thus is also called the Rice Granary of the Philippines.

Located adjacent to the National Capital Region (NCR), it has benefited from the "spillover" from Metro Manila. It is a part of the National Industrial Core Region, together with NCR and Region IV or the Southern Tagalog Region. The Core Region contributed 70% of manufacturing value added in 1988. It has emerged as an alternative area for investment to Region IV but is still overcoming the effects of the Mount Pinatubo eruption in 1991.

Only 66 kilometers away from Metro Manila, Central Luzon contains the largest plain in the country and is the gateway to the Northern Luzon regions. It covers a total land area of 21,470 square kilometers. The City of San Fernando, in Pampanga, is the regional center. Aurora was transferred from Region IV to Region III through Executive Order No. 103 in 2002.

Region III covers a total land area of 2,147,036 hectares. Of this, 1,204,649 hectares are alienable & disposable lands (A&D) and 915,119 hectares are forest lands. Forty-one percent (41%) of the A&D lands are agricultural plains, with rice as the major crop. The region also produces corn, banana, fruits, and vegetables. Central Luzon is rich in timber and mineral resources (both metallic and non-metallic). Aurora is known for its timber; Zambales for its refractory chromite, copper and nickel deposits; Tarlac for Manganese; Bulacan for marble; Pampanga for sand and gravel; and Nueva Ecija for feldspar.

Fertile rice lands, melon patches and fishponds can also be found along rivers and tributaries. Region III accounts for the third largest aquaculture production in the Philippines. Aurora's 332-kilometer coastline and Zambales' 272 kilometers are teeming with marine resources. Central Luzon has 17 sites included in the initial components of the National Integrated Protected Areas System (NIPAS), consisting of three (4) national parks, one (1) bird/fish sanctuary, one (1) naval base perimeter, and 11 watershed forest reserves.

The three-layered virgin forest of Subic Bay and Bataan is home to the world's largest bats: the giant flying fox (*Acerodon jubatus*) and the golden crown flying fox (*Pteropus vampyrus*). Over the years, these two species of giant fruit bats have roamed the 10,000-hectare Subic Watershed and Forest Reserve, which is among the world's largest roosting sites for bats.

The major trading centers in the region are Olongapo in Zambales, Angeles City and San Fernando in Pampanga; Cabanatuan and San Jose in Nueva Ecija; Balanga in Bataan province, Tarlac City, Tarlac and Malolos, Bulacan. (Source: DENR Regional Profile)

4.2.3.5 Region 4A (Calabarzon)

Region IV-A also known as CALABARZON was created by virtues of EXECUTIVE ORDER 103 which was approved on May 17, 2002, creating Region IV A and Region IV-B and transferring the province of Aurora under the territorial and administrative jurisdiction of Region III. The region is located in south-western part of Luzon, just south and east of Metro Manila, on the east by the Philippine Sea and Bicol Region, on the south by Verde Island Passage, and on the west by Luzon Sea. It is practically accessible via all types of land transportation.

CALABARZON consists of five (5) provinces, thirty-one (31) congressional districts, twenty (20) cities, one hundred twenty-two (122) municipalities, and four thousand nineteen (4,019) barangays. The 20 cities of the region are: Antipolo City (Rizal), Bacoor City (Cavite); Cavite City (Cavite); Imus City (Cavite); Trece Martirez City (Cavite); Tagaytay City (Cavite); Dasmariñas City (Cavite); General Trias City (Cavite); City of Biñan (Laguna); Cabuyao City (Laguna); Calamba City (Laguna); San Pablo City (Laguna); San Pedro (Laguna); Sta. Rosa City (Laguna); Batangas City (Batangas); Lipa City (Batangas); Tanauan City (Batangas); Sto. Tomas City (Batangas); Lucena City (Quezon); and Tayabas City (Quezon). Quezon province has the greatest number of municipalities and barangays while Rizal province has the least.

CALABARZON has varied landforms. It consists partly of coastal areas and mostly upland interior areas of slightly moderate rolling or undulating plains and hills, and mountains. Almost sixty percent of the region's land area has a slope ranging from 0-18 percent.

Batangas province has a total land area of 316,581 hectares or 3,165.81 square kilometers. It covers about 20 % of the total land area of CALABARZON and is considered the second largest province in the region. It has a unique cove-like shape in coastal areas lying at the south-eastern portion of the province. It consists mostly of moderately sloping to rolling and very steep hills with scattered mountainous areas.

Cavite province has a total land area of 128,755 hectares or 1,287.55 square kilometers, situated at the southern end of the province of Rizal. It covers about 8% of the total land area of the CALABARZON. It is characterized by rolling hinterlands punctuated by hills, with shoreland fronting Manila Bay at sea level, and the rugged portion at the boundary of Batangas where Dos Picos mountains are located.

Laguna province has a total land area of 175,973 hectares or 1,759.73 square kilometers. It is the third-largest province in the region which covers about 11% of the total land area of the CALABARZON. It is considered as an inland province that comprises the largest portion of the Laguna de Bay Region where the Laguna Lake lies, the country's largest inland water and the second-largest freshwater in Southeast Asia. It is characterized by flat and rugged terrain and its slope ranges from level to steep slope.

Quezon province has a total land area of 870,660 hectares or 8,706.60 square kilometers. It is the largest province in CALABARZON having 54% of the total land area of the region. On the other hand, it has a rugged terrain with few plains, valleys and swamps. The undulating lowlands along the coast are well-drained. The province is very narrow, with an average width of about 30 kilometers.

Rizal province has a total land of 130,892 hectares or 3,308.92 square kilometers and about 8% of the total land area of CALABARZON. Its topography is a combination of valleys and mountains, with flat low-lying areas on the western portion, rugged ridges and rolling hills that form part of the Sierra Madre ranges in the eastern portion. (Source: DENR Regional Profile)

4.2.3.6 Region 4B (MIMAROPA)

The name is an acronym that stands for its provinces, which are: Mindoro Occidental, Mindoro Oriental, Marinduque, Romblon, and Palawan. There are only two cities in the entire region: Calapan City in Oriental Mindoro and Puerto Princesa City in Palawan, while there are 71 municipalities that comprise the region.

The region was created on May 17, 2002, dividing region IV into regions IV-A and IV-B. It is envisioned that the division of the regions will effect a more equitable distribution of wealth and spur countryside development in MIMAROPA. Most recently, the roll-on roll-off (RO-RO) inter-island shipping lane received a big boost when the Strong Republic Nautical Highway (SRNH) was launched. The RO-RO transport system is envisioned to bridge the islands and open new markets in the areas of trade and tourism. MIMAROPA is envisioned to serve as part of the backbone of the country's RO-RO network. (source: DTI Regional Profile)

MIMAROPA is probably the most biologically significant region in the country in terms of richness in both terrestrial and marine species diversity. Located in the Region are nineteen (19) National Integrated Protected Areas System (NIPAS) sites occupying a total land area of 1,614,578.63 hectares. It is home to a number of wildlife species found only in the islands including the Tamaraw, Calamian deer, Palawan flying fox, Mindoro imperial pigeon, Mindoro bleeding heart, Palawan hornbill, Mindoro hornbill, Black hooded coucal, Scarlet collared flowerpecker, Palawan peacock pheasant, among others.

MIMAROPA boasts of a long coastline totaling 6,428 kilometers which is 17.7% of the country's total coastline of 36,289 km. It is made up of twelve (12) main islands, namely: Marinduque, Mindoro & Lubang, Romblon, Tablas & Sibuyan, Palawan, Dumarang, Coron, Culion, Balabac & Linapacan, It is one of two (2) Regions sharing no land border with another Region, the other one being Region VIII (Eastern Visayas). The entire MIMAROPA area is also part of the Coral Triangle Initiative (Philippines, Indonesia and Malaysia)

MIMAROPA is also rich in mineral resources. Important metallic minerals that can be found include copper, gold, silver, iron, lead, zinc, molybdenum, pyrite, manganese, nickel, chromite, cobalt, mercury and chromium. Non-metallics are: coal, asbestos, guano and phosphates, red and white clay, marble, barite, jade and silica. (Source: DENR Regional Profile)

4.2.3.7 Region 5 (Bicol Region)

Geographically, Bicol Region is located in the southernmost tip of Luzon, generally at the mid-section of the country. The region is the gateway of Luzon to the Visayas and Mindanao and is within the international seas, hence, the gateway to the Pacific. Bicol is accessible by land from Manila and the rest of Luzon thru the Maharlika and Quirino Highways. From the Visayas and Mindanao islands, it can be reached via the Matnog ferry terminal. Manila is about 10 hours away from Legaspi City. It is serviced by major bus lines traversing the Manila-Bicol route.

Bicol Region is composed of four contiguous provinces: Albay, Camarines Sur, Camarines Norte, and Sorsogon; two island provinces of Catanduanes and Masbate; and seven cities namely, Legaspi, Naga, Iriga, Tabaco, Ligao, Sorsogon, and Masbate.

The region is home to nineteen (19) Protected Areas covering 500,221.40 hectares: Mt. Mayon Natural Park, Bicol Natural Park, Abasig-Matogdon-Mananap Natural Biotic Area, Lagonoy Biotic Area, Mt Isarog Natural Park, Malabungot Protected Landscape, Catanduanes Natural Park, Bulusan Volcano Natural Park, Bongsanlay Natural Park, Buhi Sildlife Sanctuary, Mt Masaraga Watershed Forest Reserve, Caramoan Natural Park, Libmanan Caves and Natural Park, Tugbo Watershed Forest Reserve, Naro Island Wildlife Sanctuary, Juban Magallanes Watershed Forest Reserve, Chico Island Wildlife Sanctuary, Juban Magallanes Watershed Forest Reserve, and the largest of which, the Ticao-Burias Pass Protected Seascape, which spans an area of 414,244 hectares, covering portions of the provinces of Albay, Sorsogon, Masbate and some barangay in Camarines Sur.

It also has fourteen (14) Proclaimed Watershed Forest Reserves which has a total area of 98,766.15 hectares. . (Source: DENR Regional Profile)

Bicol Region is regularly exposed to a variety of natural hazards including tropical storms, typhoons, droughts, drought spells, flash floods, floods, landslides and volcano eruptions, causing frequent destruction, damage and losses.

4.2.3.8 Region 6 (Western Visayas Region)

Region VI, also known as Western Visayas, is an administrative region of the Philippines that occupies the western portion of Visayas. It has a total land area of 12,828.97 sq km with borders including Sibuyan Sea on the north, Visayan Sea on the northeast, Guimaras strait on the east, Iloilo strait and Panay gulf on the south, and Sulu Sea on the west. The geography of the region is comprised of the major island of Panay, and a smaller island which is Guimaras. It is also comprised of the western half of Negros Island. It is made of six provinces, namely, Aklan,

Antique, Capiz, Guimaras, Iloilo, and Negros Occidental. It also has two highly urbanized cities, that is, Bacolod and Iloilo City with the latter being the regional center. The region also consists of 14 component cities, 117 municipalities, and 4,051 barangays.

Within Western Visayas, you can find wide stretches of coastal lowlands with rugged hills and mountains in the interior, along with rich volcanic soils. Due to the characteristics of the region's lands, it is blessed with plenty of food sources, biodiversity, and a rich culture which natives and tourists alike can both appreciate. Among the things that Western Visayas is known for is the island of Boracay, which is a popular getaway destination, the antique houses and churches of Iloilo, the mango capital which is Guimaras, the seafood capital which Capiz is known for, and the sugarcane industry of Negros. (Source: <https://cda.gov.ph/region-6/about/>)

4.2.3.9 Region 7 (Central Visayas Region)

Central Visayas is composed of CEBU, BOHOL, NEGROS ORIENTAL, and SIQUIJOR. It is the second smallest region in the Philippines with a total land area of 14,923 square kilometers. This constitutes about 5 percent of the country's land area.

The Central Visayas Region (Region 7) lies at the center of the Philippine archipelago between the major islands of Luzon and Mindanao. It is bounded on the north by the Visayan Sea; on the east by the Camotes Sea; on the south by the Mindanao Sea; and on the west by the province of Negros Occidental. Borders in the regions are based on political boundaries. It is one of the eight anchor tourist destinations in the country and one of the supra-regions in the Visayas which strength is tourism.

Region 7 is among the most developed and the fourth largest regional economy in the country. Central Visayas hosts many industries, including footwear, ICT & IT enabled services, electronics, wearables, food processing, marine, houseware and furniture, among others. According to data from the Philippine Statistics Authority (PSA), Central Visayas ranked 4th in terms of regional share to the country's GDP in 2018. (source: DTI Regional Profile)

The Central Visayas Region has some crop (mainly sugar cane, coconut, palay, corn, and cassava) and grazing land. However, little of the region's intact forests remain. Mineral resources—including silver, manganese, copper, gold, limestone, silica, and coal—are abundant and account for one of the largest revenue sources for the region. The waters surrounding the island provinces are well-known fishing grounds.

Central Visayas is second to the National Capital Region in terms of remaining forest cover (74,869 hectares). As of 2003, only 3 percent of the remaining forest in Central Visayas is considered "closed" or dense forest. Most of the forest cover (57 percent) is open forest, where the crowns of trees or shrubs only occasionally interlock. The remainder comprises mangroves (16 percent) and plantation forest (24 percent).

The region has 70,824 hectares of protected areas composed of natural parks, protected landscape/seascape, wilderness area, game refuge, and bird sanctuary.¹⁰ These protected areas help ensure the survival of rare species and maintain ecosystem services. Olango Island in Cebu, part of a bird sanctuary, supports the largest concentration of migratory birds found in the country (67 percent of a total of 77 species). Forty-eight species of threatened/endangered animals are in this region, including black shamah and flowerpecker in Cebu and the tarsier in Bohol. Threatened marine animals in the seas off Central Visayas include species of reef fishes, elasmobranchs (rays and sharks), and cetaceans.

In the Philippines, only five water bodies are class AA, the highest inland water quality classification requiring only approved disinfection to meet safe drinking water standards. Central Visayas is home to one of these water bodies, the Ginabasan River in Cebu. In contrast, the Guadalupe River, also in this region, shows poor water quality.

Cebu is 99 percent dependent on ground water for its tap water source. A study conducted by the Department of Interior and Local Government and the GTZ showed that more than half of the towns and cities in Cebu have no access to potable water and that the potential for groundwater development to augment sources of water is low. The water supply problem is a result of forest cover loss and rapid urbanization, particularly in groundwater recharge areas.

The growing urban population of Central Visayas, especially Cebu Province, presents unique challenges to development planners and policymakers. For example, with increasing population, Cebu Province has seen a concurrent rise in the number of motor vehicles. Diesel emissions from buses, jeepneys, utility vehicles, and trucks are estimated to be the largest contributor to air pollution. |

(Source: https://www.prb.org/wp-content/uploads/2021/01/04052008pheregionalprofiles_centralvisayas.pdf)

4.2.3.10 Region 8 (Eastern Visayas Region)

Eastern Visayas or Region VIII is composed of three main islands, Biliran, Leyte and Samar, connected by the famous San Juanico Bridge. It consists of six provinces (Biliran, Samar, Eastern Samar, Northern Samar, Leyte, and Southern Leyte) and seven cities (Ormoc City, Baybay City, Maasin City, Calbayog City, Catbalogan City, Borongan City, and the regional center - Tacloban City). Region VIII lies on the east central part of the Philippine archipelago, directly facing the Pacific Ocean. (Source: DENR Regional Profile).

Eastern Visayas lies on the east central section of the Philippine archipelago. It comprises two main islands, Leyte and Samar, forming the archipelago's easternmost coast. It is bounded on the east and north by the Philippine Sea with the San Bernardino Strait separating Samar island from southeastern Luzon; on the west by the Camotes and Visayan seas, and on the south by the Bohol Sea with the Surigao Strait separating Leyte island from northwestern Mindanao. It has a total land area of 2,156,285 hectares (5,328,300 acres) or 7.2% of the country's total land area.[4] 52% of its total land area are classified as forestland and 48% as alienable and disposable land. Eastern Visayas has an agriculture-based economy being the top produces of abaca and the third largest coconut-growing region in the country.

The region's sea and inland waters are rich sources of salt and freshwater fish and other marine products. It is one of the fish exporting regions of the country. There are substantial forest reserves in the interiors of the islands. Its mineral deposits include chromite, uranium (in Samar), gold, silver, manganese, magnesium, bronze, nickel, clay, coal, limestone, pyrite and sand and gravel. It has abundant geothermal energy and water resources to support the needs of medium and heavy industries. (Source: DTI Regional Profile).

4.2.3.11 Region 9 (Zamboanga Peninsula)

Region IX or the Zamboanga Peninsula Region is located in the western part of Mindanao. It is bounded by: Sulu Sea on the north; Illana Bay and Moro Gulf on the south; Misamis Occidental, Lanao del Norte and Panguil Bay on the east; and the Celebes Sea on the west.

Through Executive Order No. 36 signed by President Gloria Macapagal-Arroyo on September 2001 which provides for the reorganization of the administrative regions in Mindanao, Region IX presently consists of the three (3) provinces of Zamboanga del Norte, Zamboanga del Sur and Zamboanga Sibugay. The region also has five (5) cities namely: Dapitan, Dipolog, Isabela, Pagadian and Zamboanga. The province of Basilan, on the other hand, opted to join the Autonomous Region in Muslim Mindanao.

Zamboanga Peninsula lies between the Moro Gulf, part of the Celebes Sea, and the Sulu Sea. Along the shores of the peninsula are numerous bays and islands. Its territory consists of the three Zamboanga provinces and Zamboanga City, as well as the Northern Mindanao province of Misamis Occidental. The peninsula is connected to the main part of Mindanao through an isthmus situated between Panguil Bay and Pagadian Bay. The boundary between the peninsula and the mainland is artificially marked by the border between the provinces of Zamboanga del Sur and Lanao del Norte. (source: <https://zambo.da.gov.ph/index.php/regional-profile>)

The region's topography is relatively rugged. Roughly 51% of its area are hilly; some having steeped slopes and within the elevation range of 100 to more than 1,000 meters above sea level. In terms of land classification, about 51 per cent is considered alienable and disposable and the remaining 49 per cent is classified as forest land. Almost 60,000 hectares of land that can be developed for planting crops still remain idle, while around 310,000 hectares of coconut land can be utilized for multi-cropping and pasture purposes.

The region has vast forest resources. Logs, lumber, veneer and plywood are once among its major export products. It is also richly endowed with mineral deposits both metallic and non-metallic. Metallic reserves include gold, silver, copper, chromite, iron, lead, and manganese ore. The non-metallic minerals consist of coal, clay, asbestos, limestone, quartz, silica, phosphate rock and marble. Nature also endowed it with so much natural attractions such as white sand beaches, spectacular waterfalls, dive spots, caves for spelunking, marine sanctuaries and awesome coral formations, among others. (Source: DTI Regional Profile)

4.2.3.12 Region 10 (Northern Mindanao)

Northern Mindanao has five provinces, namely, Misamis Oriental, Misamis Occidental, Bukidnon, Lanao del Norte and Camiguin. It comprises two (2) highly-urbanized cities, seven (7) constituent cities, 84 municipalities and 2,022 barangays.

Misamis Oriental's strategic location allows it to qualify as a centre of industry, trade and commerce in the region. To date, there are already 37 major industrial and manufacturing firms that are based in Misamis Oriental.

Rich in aquamarine and agricultural products, Misamis Occidental is seen to get more economic opportunities in the future. The province is also open to eco-tourism investments since its location is efficient to most ports in Northern Mindanao and since it also has a wide range of pristine natural grandeur. The province boasts off its long coastline where one of the country's shrimp spawning grounds is located. Aside from shrimps, Misamis Occidental also offers other aquamarine resources such as shellfishes, prawns and crabs which will eventually pave its way to become the aquamarine centre of the Philippines.

Camiguin – also known as the “Paradise Island” of Mindanao – boasts off its scenic sea and mountain views, natural hot and cold springs and white beaches. Camiguin is located 90 kilometres north of Cagayan de Oro. Anyone coming from Cagayan de Oro can take a 45-minute boat ride through the Benoni Port to reach the province of Camiguin. The province has a population of around 88 thousand and has a land area of 292 square kilometre.

Bukidnon, the province which sits at the heart of Mindanao, gets a taste of every benefit each province in Region 10 enjoys. The province has a good road system that is very accessible for those who are travelling by land through Cagayan de Oro and through other entry points in Mindanao. It is also located in an area where the climate is very ideal for foreign and local dwellers. Bukidnon's vast land of pineapple and other produce allows it to perform remarkably in the agri-business industry. In fact, two of the country's biggest pineapple companies – Del Monte Philippines and Dole Philippines – have been operating in the province for years. Meanwhile, several adventure and eco-tourism parks have also added to the province's popularity, making it one of the top go-to places for tourists visiting the Philippines.

The province of Lanao del Norte vaunts its 153,738 hectares of developed agricultural land, a rich coastline for aquamarine produce, and some private fishing grounds. Coming along the launching of the Cagayan-Iligan Industrial Corridor is the support from downstream and major industrial plants. The province also has a lot of potentials in the agri-business sector and can push through its global aim to become one of the top agro-industries in the province. (Source: DTI Regional Profile).

4.2.3.13 Region 11 (Davao Region)

Davao Region is located in the Southeastern portion of the island of Mindanao surrounding the Davao Gulf. It is bounded on the north by the provinces of Surigao del Sur, Agusan del Sur and Bukidnon. In the east it is bounded by the Philippine Sea; and in the west by the Central Mindanao provinces. Within the broader geographic context, the Davao Region area faces Micronesia in the Southern Pacific Ocean to the east, and the Eastern Indonesia through the Celebes Sea to the south.

It is composed of 4 provinces, 1 independent city, 4 component cities and 44 municipalities, grouped into 11 congressional districts and divided into 1,160 barangays. The provinces are Davao Oriental, Davao del Norte, Compostela Valley and Davao del Sur. The cities are Davao City, Panabo City, Tagum City, Digos City and Island Garden City of Samal.

About 26% of the total area of the region or 5,021.48 sq. kms. has slope range of 0-8%. These areas, which maybe for non-forest purposes, e.g. agriculture, industries and settlement. Among the provinces in the region, Compostela Valley has the largest area with 0-8% slope with 1,300.9 sq. kms. followed by Davao del Norte with 1,219.8 sq. kms.

The region is characterized by extensive mountain ranges extending along the western border, in the northern central area and in the northwestern area leading to the peninsula in the southeast with uneven distribution of plateaus and lowlands. Its coastline reached to 1,600 square kilometer. The area is dominated by peninsular and island topography.

The Region has abundant water supply both from surface and ground water resources. About 85.7% of the total water supply comes from surface water and only 14.3% comes from ground water. (Source: DTI Regional Profile).

4.2.3.14 Region 12 (SOCCSKSARGEN)

Region 12 or SOCCSKSARGEN Region is located in South Central Mindanao. It is composed of 4 provinces: South Cotabato, Cotabato, Sultan Kudarat and Sarangani and 5 cities, namely: General Santos, Cotabato, Koronadal, Tacurong and Kidapawan. General Santos and Cotabato are chartered cities whereas Koronadal, Tacurong and Kidapawan are component cities. South Cotabato has 11 municipalities and 1 component city. Cotabato has 17

municipalities and 1 component city. Sultan Kudarat has 12 municipalities and 1 component city. Region 12 has 45 municipalities and 1,192 barangays.

Region XII varies from flat, fertile plains to irregular landscape to wide valleys, scattered hills and intensive mountain ranges. About half of the total land area of the region's land resources fall within the 0-500m in elevation. It also has an extensive coastline which stretches to 320 kilometers. The mountain ranges of the region are in the northern and eastern portions of Cotabato and in the central and southwestern portions spanning through the three provinces of Sultan Kudarat, South Cotabato and Sarangani.

As for its climate, Region XII has a rainfall of more or less even distribution throughout the year with no pronounced rain periods. The region experiences high annual rainfall which ranges from 1,871mm/year to 2,876mm/year (considered moist). Rainfall patterns of the region contribute to the high production levels in agriculture. (source: <https://ro12.doh.gov.ph/index.php/health-profile/regional-profile>)

4.2.3.15 Region 13 (Caraga Region)

The Caraga Region (Region XIII) was created by virtue of Republic Act 7901, signed into law by President Fidel V. Ramos on February 23, 1995. The region is composed of five (5) provinces: Agusan del Norte, Agusan del Sur, Surigao del Norte, Surigao del Sur, and Dinagat Island; six (6) cities: Butuan, Cabadbaran, Bayugan, Surigao, Tandag and Bislig ; sixty-seven (67) municipalities and 1,308 barangays. Butuan City is the regional center.

With a land area of 18,847 sq. kms., present-day Caraga is bounded by Butuan Bay, Surigao Strait, and Bohol Sea on the north, the Philippine Sea on the east, the provinces of Davao del Norte, Davao Oriental, and Compostella Valley on the south, and Misamis Oriental and Bukidnon on the west.

Caraga's diverse topography includes mountain ranges, flat farmlands, lakes, beaches, waterfalls, rivers, and wetlands. Forestland occupies an estimated 71% of the total land area. Agusan Marsh in Bunawan, Agusan del Sur covers an area roughly the size of Metro Manila, and is one of the most ecologically significant wetlands in the Philippines. Among the lakes in the region, Lake Mainit is the widest. It traverses eight municipalities: Alegria, Tubod, Mainit and Sison in Surigao del Norte, and Tubay, Santiago, Jabonga and Kitcharao in Agusan del Norte. The most productive agricultural area of the region lies along the Agusan River Basin.

The region is noted for its wood-based economy. It also has extensive water resources and rich mineral deposits such as iron, gold, silver, nickel, chromite, manganese and copper. Its major agricultural products are palay, banana, palm oil, coconut, corn, rubber, calamansi, mango, seaweeds, prawns, milkfish, crabs, and other livestock. Caraga is also a major shipping point for products to and from Manila, Cebu, and Cagayan de Oro. With a roll-on, roll-off (RORO) ferry service now in place, Surigao City serves as a vital transportation link for trucks and buses bound for Luzon.

White beaches abound in the islets and islands of Guyam, Daku, Naked or Pansukian, La Janosa, Pig-ot, Dinagat, Bucas Grande, Britania and the General island in Cantilan, which are ringed by coral reefs suitable for swimming and snorkeling. Other attractions include naturally-carved water channels amidst mangrove forests in Barangay Manjagao; the floating village of Barangay Dayasan, the Buenavista Cave; and the tropical white sand beaches in Sagisi island. The Britania in San Agustin-Surigao del Sur features 25 islets and islands of white sand and clusters of limestone hills. The Laswitan Lagoon and the Enchanted River in Surigao del Sur are also major tourist destinations. The Tinuy-an Falls in Bislig City is known as the Little Niagara Falls of the Philippines.

Siargao is known as the "surfing capital of the Philippines." The term "Could 9," which refers to a surfing wave considered as one of the best in the world, has become synonymous with Siargao, it being the site of the Siargao

International Surfing Cup – a domestic and international surfing competition sponsored by the provincial government of Surigao del Norte. (Source: DTI Regional Profile).

4.2.3.16 Bangsamoro Autonomous Region of Muslim Mindanao (BARMM)

BARMM is composed of all the predominantly Muslim provinces in the Philippines and is the only region in the country with its own government.² ARMM is divided into two geographical areas: the Mindanao mainland and the Sulu Archipelago. The provinces of Lanao del Sur, Maguindanao, and Shariff Kabunsuan are situated on the mainland, while Basilan, Sulu, and Tawi-Tawi are located within the Sulu Archipelago.

The fishing and agricultural industries—supported by fertile flatlands, a conducive climate, and rich marine resources—offer excellent opportunities for improving the economic well-being of the people.

There are a total of 10 protected areas in the region with a total area of 184,204 hectares. The Lake Lanao Watershed Reservation makes up 98 percent of this land area. Lake Lanao, near Marawi City, is the second largest freshwater body in the Philippines and supports the Maria Cristina hydroelectric plant, the largest source of hydroelectric power in Mindanao. It was once considered one of the most biodiverse lakes in the world, yet decades of logging and pollution have significantly degraded the water quality.

Forty-four animal species are threatened with extinction, including the Philippine eagle (*Pithecophaga jefferyi*), Sulu hornbill (*Anthracoceros montani*), and the hawksbill sea turtle (*Eretmochelys imbricata*). Threats to these species include logging, encroachment on their habitat, land cover change, and overexploitation. The Tubbataha Reefs National Marine Park is the nation's first marine park, located in the center of the Sulu Sea, northwest of BARMM. It is the first natural UNESCO World Heritage Site in the country. The Allah Watershed Forest, the Palimbang Watershed, the Salaman River Watershed, the Alip-Dalcol Watershed, and the Daguma Mountain Range in Sultan Kudarat provide water for the Allah River irrigation system. Priority sites for conservation include Munai/Tambo, Mt. Piagayungan, Ligawasan Marsh, and Mt. Daguma.

Liguasan (Ligawasan) Marsh is a vast 288,000 hectare swamp stretching across the provinces of Maguindanao of ARMM and Cotabato and Sultan Kudarat of Region 12. It is rich in biodiversity and important for the livelihoods of the approximately 278,000 people living around the area. The marsh is a depository for water drained from the Cotabato River Basin and serves to prevent the flooding of low-lying downstream areas in central Mindanao, thus making farming viable in the lowlands. Communities also rely on fish from the marsh as a major food source.

4.3 Social Baseline

4.3.1 Poverty Incidence

Driven by high growth rates and structural transformation, between 1985 and 2018 poverty rates in the Philippines fell by two-thirds. The poverty rate declined from 25.2 percent in 2012 to 16.7 percent in 2018, and the Gini coefficient also declined from 46.5 to 42.3 during the same period.⁸ However, economic growth and poverty reduction efforts were severely hampered by the COVID-19 pandemic. The country had the worst economic contraction of - 9.5 percent in 2020 in its post-war history resulting from the triple shock of the COVID-19 that included global recession, health crisis, and containment measures that stifled the domestic economy. The poverty rate increased from 16.7 percent in 2018 to 18.1 percent in 2021⁹, but remained lower than the 23.5 percent in 2015, largely due to the government cash transfers targeted to low-income households. With

⁸ World Bank Group. 2022. World Development Indicators. <https://databank.worldbank.org/source/world-development-indicators>

⁹ Philippine Statistics Authority. 2022. Official Poverty Statistics of the Philippines: Preliminary 2021 Full Year. https://psa.gov.ph/sites/default/files/Preliminary%202021%20Full%20Year%20Poverty%20Statistics%20Publication_25Aug2022_1.pdf

continued recovery efforts, the country is getting back on track to transition from lower middle-income country with gross national income (GNI) per capita of US\$3,640 in 2021 to upper middle-income with GNI per capita starting at US\$4,256 in the next few years.¹⁰ However ensuring that economic growth is inclusive and felt by its poorest and vulnerable population remains to be a challenge for the Philippines. Both the economic and social impacts of the pandemic disproportionately affected the poorest and most vulnerable: many lost their incomes and children who did not have the means to learn with digital devices experienced learning losses.

Among regions, the highest poverty incidences were for BARMM (see Table ___). However, it is worth noting that BARMM also registered having significantly noticeable improvements from 2018. BARMM also has the lowest increase in monthly per capita poverty threshold, while Central Visayas recorded the highest increase (21.3%). Poverty threshold per capita or the minimum income needed to meet both food and non-food necessities increased by 11.9% in 2021 to P2,406 per month from P2,151 in 2018. In terms of the magnitude of poor families and population, the most number of poor families and populations can be found in Region VII (see Table ___). The decline in the number of poor families and population between 2015 to 2018 was reversed in 2021 as a result of the COVID-19 pandemic. Eleven (11) regions out of the sixteen (16) regions, recorded higher number of poor families and poor population with Region VII registering the highest increase with an additional 850,627 more poor population, or 188,445 more poor families.¹¹

Table 13: Monthly per Capita Poverty threshold and Poverty Incidence among Population and Among Families, by Region, 2018, 2021

	Monthly per Capita Poverty Threshold (in PhP)		Poverty Incidence among Population (% Estimates)		Poverty Incidence among Families (% Estimates)	
	2018	2021 ^P	2018	2021 ^P	2018	2021 ^P
<i>PHILIPPINES</i>	2,151	2,406	16.7	18.1	12.1	13.2
NCR	2,390	2,748	2.2	3.5	1.4	2.2
CAR	2,076	2,359	12.0	9.9	8.6	6.9
I: Ilocos Region	2,255	2,593	9.9	14.4	7.0	11.0
II: Cagayan Valley	2,092	2,358	16.3	15.4	12.5	11.7
III: Central Luzon	2,246	2,632	7.0	11.4	5.2	8.3
IV-A: CALABARZON	2,327	2,588	7.1	10.2	5.1	7.2
IV-B: MIMAROPA	1,943	2,193	15.1	20.8	10.5	15.0
V: Bicol Region	2,038	2,306	27.0	29.3	20.0	21.9
VI: West. Visayas	2,041	2,257	16.3	19.0	11.9	13.8
VII: Cen. Visayas	2,145	2,602	17.7	27.6	13.4	22.1
VIII: East. Visayas	2,082	2,237	30.7	28.9	23.9	22.2
IX: Zambo. Pen.	2,137	2,395	32.7	30.1	25.4	23.4
X: North. Mindanao	2,070	2,403	23.1	26.1	17.3	19.2
XI: Davao Region	2,163	2,342	19.1	16.8	13.9	11.9
SOCCSKSARGEN	2,085	2,204	28.2	28.1	22.4	21.4
XIII: CARAGA	2,115	2,278	30.5	33.2	24.1	25.9
BARMM	2,310	2,358	61.8	37.2	54.2	29.8

Note: Poverty threshold is the minimum income needed to meet basic food and non-food needs. Poverty incidence is the proportion of poor Filipinos/families whose per capita income is not sufficient to meet their basic food and non-food needs.

Source: PSA 2021 Official Full Year Poverty Statistics

¹⁰ World Bank Group. 2023. Country Overview. <https://www.worldbank.org/en/country/philippines/overview>

¹¹ Congressional Policy and Budget Research Department House of Representatives. August 2022 (No. 51). Facts in Figures [FF2022-51 Regional Poverty Statistics Update.pdf](#) (econgress.gov.ph)

Source: Congressional Policy and Budget Research Department House of Representatives. August 2022 (No. 51). Facts in Figures.

Table 14: Magnitude of poor families and poor population by Region, 2015, 2018, 2021

Year	Magnitude of Poor Families (Estimate in '000)			Magnitude of Poor Population (Estimate in '000)		
	2015	2018	2021 ^P	2015	2018	2021 ^P
<i>PHILIPPINES</i>	<i>4,138</i>	<i>3,005</i>	<i>3,496</i>	<i>23,678</i>	<i>17,670</i>	<i>19,992</i>
NCR	86	48	76	523	302	482
CAR	68	36	31	390	214	181
I: Ilocos Region	161	85	139	944	510	763
II: Cagayan Valley	106	106	105	612	583	568
III: Central Luzon	213	143	248	1,179	837	1,430
IV-A: CALABARZON	313	190	296	1,793	1,102	1,676
IV-B: MIMAROPA	123	77	118	747	467	668
V: Bicol Region	377	256	293	2,307	1,621	1,815
VI: West. Visayas	317	218	269	1,852	1,267	1,517
VII: Cen. Visayas	423	246	435	2,168	1,371	2,221
VIII: East. Visayas	326	253	251	1,831	1,420	1,389
IX: Zambo. Pen.	237	213	205	1,367	1,218	1,145
X: North. Mindanao	337	194	228	1,813	1,129	1,323
XI: Davao Region	212	178	165	1,149	978	900
SOCCSKSARGEN	328	253	258	1,731	1,348	1,400
XIII: CARAGA	179	149	172	1,028	822	924
BARMM	334	356	207	2,242	2,481	1,590

Note: Magnitude estimates the total number of poor families / population whose income falls below the poverty threshold.

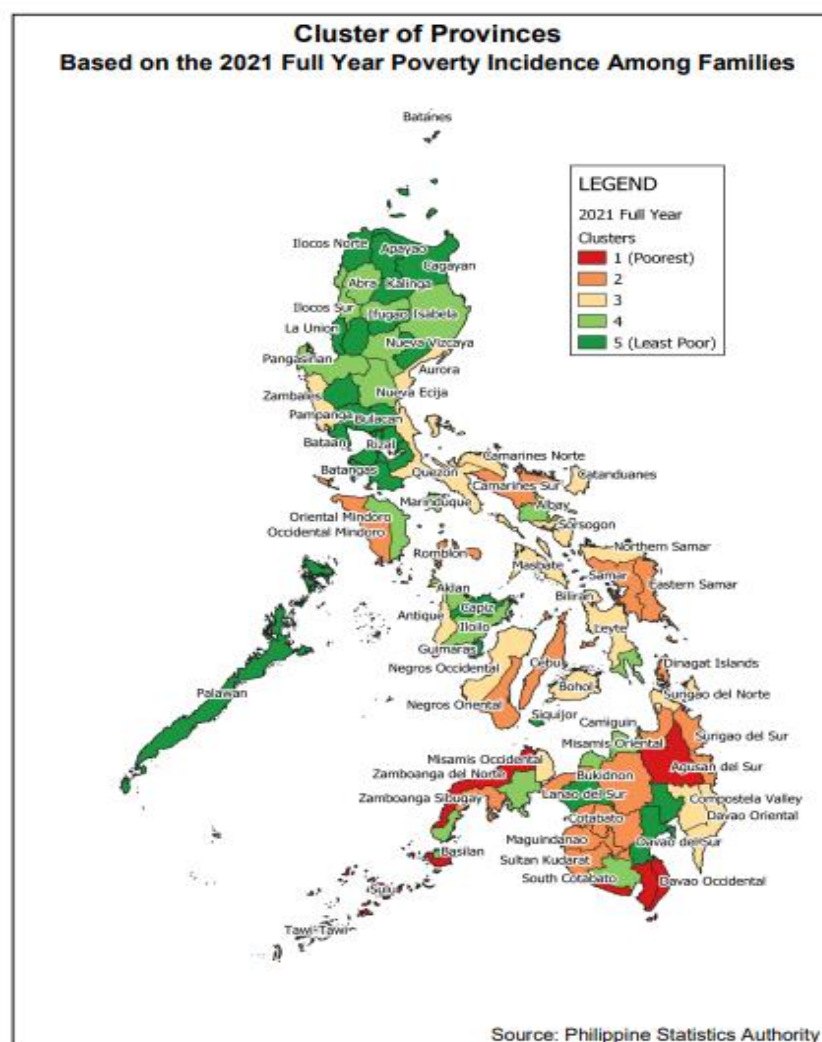
Source: PSA 2021 Official Full Year Poverty Statistics

Source: Congressional Policy and Budget Research Department House of Representatives. August 2022 (No. 51). Facts in Figures.

At the provincial level, the provinces which belonged to the group with the least poverty incidence among families in 2015, 2018 and 2021 were Bataan, Batanes, Benguet, Bulacan, Capiz, Cavite, Guimaras, Ilocos Norte, Laguna, Pampanga, and Rizal. The provinces of La Union, Siquijor, and Tarlac were included in the least poor cluster since 2018. Meanwhile, the other provinces that joined this roster of least poor cluster in 2021 were: Apayao, Batangas, Cagayan, Davao del Norte, Davao del Sur, Ifugao, Kalinga, Lanao del Sur, Palawan, and Quirino. On the other hand, Sulu was consistently included in the cluster with relatively high poverty incidence among families in 2015, 2018 and 2021. Basilan was in the poorest cluster in 2018 and 2021, while the new entrants in 2021 were Agusan del Sur, Davao Occidental, Sarangani, and Zamboanga del Norte (see figure 7).¹²

¹² Philippine Statistics Authority. 2022. Official Poverty Statistics of the Philippines: Preliminary 2021 Full Year

Figure 8: Cluster of Provinces Color-coded Map 2021 Full year Poverty Incidence Among Families



Source: Philippine Statistics Authority. 2022. Official Poverty Statistics of the Philippines: Preliminary 2021 Full Year.

4.3.2 Education and Health

Even before the COVID-19 pandemic in 2020, there were worrying signs of an education crisis in the Philippines. The Philippine education system is in urgent need of transformation. This has been the assessment of many studies on education over the past decades. In 1991, the Education Commission pointed out the looming crisis in the overall quality of education in the country. In 2022, over three decades later, a second Education Commission will be convened to address the education crisis. Education infrastructure continues to grapple with inadequacies in education perennials—classrooms, teachers, textbooks, facilities, and modern equipment—especially among marginalized communities (PDP 2023-2028).

In a 2022 report by the World Bank on “learning poverty,” which assesses difficulties in reading comprehension among elementary students, the Philippines had a dismal 91 percent rating of learning poverty. Meanwhile in the recently released (Dec. 2023) results of the 2022 Programme for International Student Assessment (PISA) of the Organisation for Economic Co-operation and Development (OECD), the proportion of students scoring below a baseline level of proficiency (Level 2) did not change significantly in mathematics, reading and science

compared to the 2018 results of the Philippines.¹³ The Philippines ranked 77th out of 81 countries globally in the PISA conducted by the OECD for 15 year old learners. The DepED said that the Philippines poor showing in the 2022 PISA indicates a five-to-six year lag in learning competencies in the country.¹⁴ The DepED has introduced reforms including the K-10 Matatag curriculum to improve students' performance in mathematics, science and reading comprehension.

Aside from the need to improve the curriculum, the Philippines is also facing a serious shortage in school infrastructure, depriving millions of learners of adequate and safe learning spaces. The Philippines has a total of 47,382 public schools with 327,794 school buildings, catering to 24 million learners.¹⁵ The Department of Education (DepEd) estimates that around 170,000 classrooms¹⁶ would be needed to meet the increasing student population. This shortage in classrooms is exacerbated by the existing conditions of school infrastructure as well as the fact that the country's school infrastructure is highly exposed and vulnerable to the disruptive impact of geological and climate-related hazard events. As a result, the education system must frequently cope with a growing number of affected learners and teachers, loss of classrooms, economic losses, and long periods of education service downtime.

The COVID-19 pandemic exacerbated the education crisis which the Philippines has been confronted with. Aside from the economic contraction that the Philippines experienced because of the COVID-19 pandemic, it also resulted in significant social sector losses, which may be harder to recover. These include learning losses, low levels of routine vaccinations, slowdown of healthcare-seeking behaviors in the population, and significantly for children, slow progress was seen in childhood nutrition outcomes, with potentially lifelong health, education, and, ultimately, economic effects. From 2015 to 2021, the prevalence of stunting among children under five years old decreased from 33.4 to 26.7 percent and wasting from 7.1 to 5.5 percent while overweight remained at 3.9 percent. However, the rate of decline in stunting prevalence has been relatively slow compared to other countries with similar levels of income.¹⁷

The full impact of this erosion in human development will not be apparent until later, and, if left unaddressed, will lead to poor education and health outcomes for a generation of children. Rebuilding and catching up will require strong prioritization of education and health to prevent a more lasting negative impact on human development.¹⁸

4.3.3 Indigenous Peoples

The term "Indigenous Peoples" (IP) is often described as social groups with a cultural identity distinct from the mainstream society. Due to the varied and changing contexts in which indigenous peoples are found, no single definition can capture their diversity. All definitions of the concept of "indigenous" regard self-identification as a fundamental criterion for determining the groups to which the term indigenous should be applied. Mindanao are the home of the Lumads. "Lumad" is the generic term used to refer to the indigenous peoples of Mindanao. They are considered to comprise the largest number of indigenous peoples in the country. The 18 groups that compose the Lumad include the following: Subanen, B'laan, T'boli, Mandaya, Mansaka, Tiruray, Higaonon, Manobo, Bagobo, Bukidnon, Tagakaolo, Ubo, Banwaon, Kalagan, Dibabawon, Talaandig, Mamanwa and

¹³ OECD. 2023. PISA 2022 RESULTS: FACTSHEETS – PHILIPPINES

¹⁴ [PISA result indicates PH education system is 5 to 6 years behind – DepEd \(rappler.com\)](#)

¹⁵ DepEd. 2023. <https://schoolbuildings.deped.gov.ph/executive>

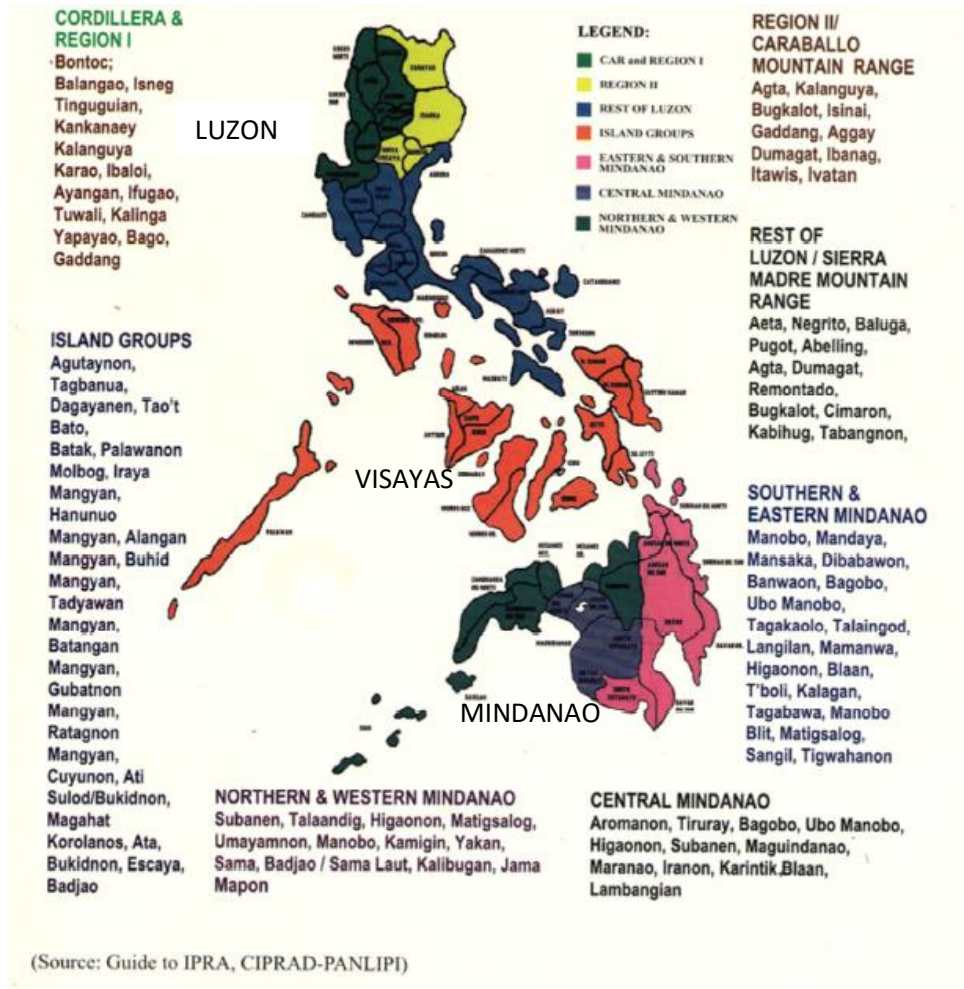
¹⁶ The shortage in classrooms mainly results from the normal ageing of schools, severe damage due to disasters, and the need for new classrooms due to population growth.

¹⁷ NEDA. 2022. Philippine Development Plan (PDP) 2023-2028.

¹⁸ Ibid, p. 7

Manguangan.¹⁹ The Cordillera IP groups of the Luzon uplands also account for a significant portion of the indigenous population. Other distinct indigenous groups in the Philippines are the Caraballo tribes of the eastern central Luzon mountain ranges, the Agta and Aeta who are the most widely distributed (Central Luzon), the Mangyan of Mindoro, the Palawan hill tribes, the Visayas IP groups, and the Islamic IP groups of Mindanao.²⁰ Figure ___ shows a simple illustration of the territorial distribution of the major ethnographic classifications of Philippine IPs.

Figure 9: Philippine Map illustrating territorial distribution of the major ethnographic classifications of Philippine Indigenous Peoples



Source: DLSU Social Development Research Center. 2016. Teaching Philippine Indigenous Cultures: Modules for Higher Educational Institutions.

The IP population for the first time has been reflected in the PSA census data on “Ethnicity in the Philippines - 2020 Census of Population and Housing” released July 04, 2023. Based on the PSA 2020 Census, IPs identified by

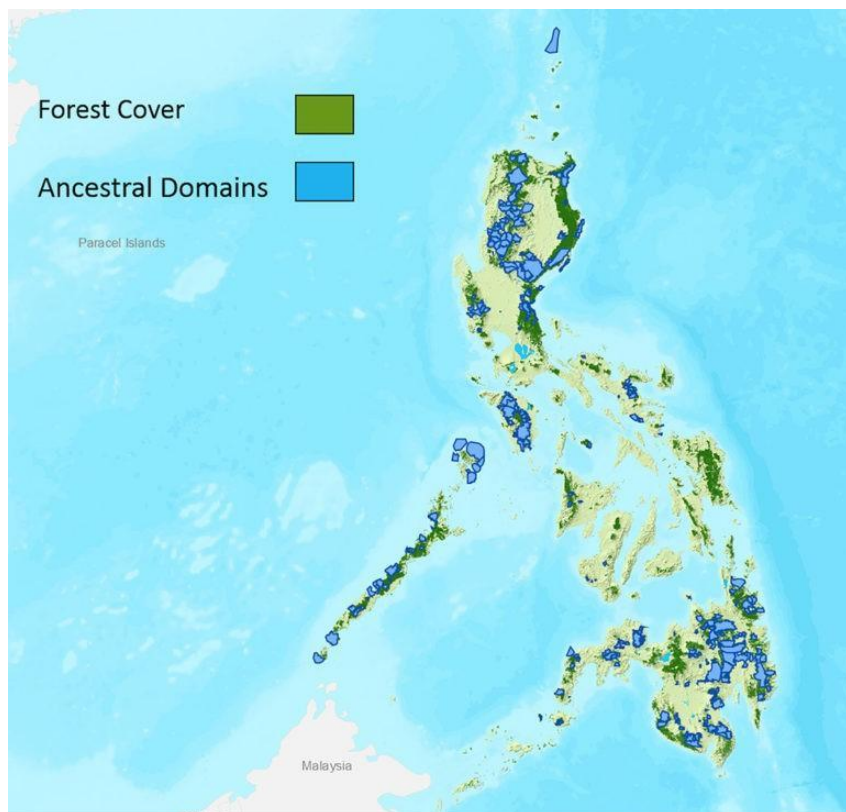
¹⁹ DLSU Social Development Research Center. 2016. Teaching Philippine Indigenous Cultures: Modules for Higher Educational Institutions

²⁰ Foundation for the Philippine Environment (FPE). 2023.

NCIP comprised 9.84 million or 9.1 percent of the 108.67 million household population. The top 10 IP groups in the Philippines accounted for about 48.3 percent of the total IPs. Subanens/Subanons ranked first with 758,499 persons (7.7%), followed by Manobos with 644,904 persons (6.6%), and Mandayas with 523,475 persons (5.3%), all of whom are IP communities found in Mindanao. Muslim tribes identified by NCMF, including the tribes that were also identified as IPs by the NCIP, accounted for 7.11 million or 6.5 percent of the 108.67 million household population in 2020²¹.

Indigenous Peoples who are traditionally farmers, hunters and fishers, have great knowledge about their environment. Indigenous Peoples communities are generally situated in areas that are rich repositories of high biodiversity. About 75 percent of areas with forest cover are within ancestral domains, as shown in Figure ____.²² This is largely due to their sustainable practices in natural resource management which have conserved the natural wealth of the land. Through generations, Indigenous Peoples have established systems and coping mechanisms, to at times very harsh conditions, rooted in their traditional knowledge, customs, and practices to different circumstances affecting their communities.

Figure 10: Philippine Map overlay of ancestral domains and the remaining forest cover in the Philippines.



Map produced by Philippine Association for Inter-Cultural Development (source: The Philippine ICCA Consortium. 2021. The Philippines: A national analysis on the status of territories of life)

21 Philippine Statistics Authority (PSA). 2023. Retrieved from <https://psa.gov.ph/content/ethnicity-philippines-2020-census-population-and-housing>

22 The Philippine ICCA Consortium. 2021. The Philippines: A national analysis on the status of territories of life <https://report.territoriesoflife.org/national-and-regional-analysis/philippines/>

However, IPs have been historically marginalized and sadly still continue to face multiple layers of social discrimination, economic marginalization, degradation of resource bases, armed conflict, land shrinking with a slow approval process of CADTs, and political disempowerment that must be addressed at the institutional and legislative levels. The IPs' socio-economic, cultural, and spiritual lives revolve around their close affinity with their ancestral domains. IPs see their right to ancestral domains continuously threatened and disregarded even with the enactment of the Indigenous Peoples Rights Act (IPRA) of 1997.

A major factor contributing to IPs' disadvantaged position is the lack of access to culture-responsive basic education. The right of IPs to education is provided in the 1987 Philippine Constitution, the IPRA of 1997 and the numerous international human rights instruments, especially in the 2007 United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). After Indigenous Peoples' decades of advocating for an education that respects and nurtures their heritage and culture, in consultation with representatives from IP communities, civil society and other government agencies, the Department of Education formulated the DepEd Order No. 62 s2011 or the National Indigenous Peoples (IP) Education Policy Framework. The Policy Framework served as an instrument for promoting shared accountability, continuous dialogue, engagement and partnership among government, IP communities, civil society and other education stakeholders. Recognizing education as a necessary means to realize other human rights and fundamental freedoms, the DepED has adopted the National Indigenous Peoples (IP) Education Policy Framework and an IP Education Program. This Program subscribes to the rights-based approach which gives primary importance to the principles of participation, inclusion and empowerment.²³

The ISRS Project may include subproject sites that are within ancestral domains and/or with IP learners. As per 2023 DepED data, there are 42,576 schools with IP Learners while there are 12,580 schools that are located within ancestral domains or ancestral lands. The 1997 IPRA Law defines ancestral domains as *“all areas generally belonging to ICCs/IPs comprising lands, inland waters, coastal areas, and natural resources therein, held under a claim of ownership, occupied or possessed by ICCs/IPs, by themselves or through their ancestors, communally or individually since time immemorial, continuously to the present except when interrupted by war, force majeure or displacement by force, deceit, stealth or as a consequence of government projects or any other voluntary dealings entered into by government and private individuals/corporations, and which are necessary to ensure their economic, social and cultural welfare. It shall include ancestral lands, forests, pasture, residential, agricultural, and other lands individually owned whether alienable and disposable or otherwise, hunting grounds, burial grounds, worship areas, bodies of water, mineral and other natural resources, and lands which may no longer be exclusively occupied by ICCs/IPs but from which they traditionally had access to for their subsistence and traditional activities, particularly the home ranges of ICCs/IPs who are still nomadic and/or shifting cultivators”*. In this context, the project should respect the rights and culture of the IP communities enabling them to fully participate and benefit from the project.

4.3.4 Security and Conflict Areas

The Philippines faces multiple security concerns, ranging from the existence of lawless armed groups, armed revolutionary groups, terrorist and violent extremist. Conflict has been a long-standing feature in the Philippines, with one of the longest-running communist insurgencies in the world, and a number of other types of conflict and violence. Currently the main types of violence and conflict include: inter-clan violence, violence by state actors against civilians, a communist-inspired guerilla campaign in the northeastern section of Mindanao, violent

23

DepED Order no. 62 s2011

extremist and criminal groups, domestic and gender-based violence (GBV), violence around elections, and local conflicts over resource and community rights.

The degree and magnitude of conflict in Mindanao vary depending on the geographic location with Bangsamoro Autonomous Region in Muslim Mindanao (BARMM) particularly being a more sensitive area. Unique to the Bangsamoro region is the presence of “rido”, a type of sporadic and retaliatory/vendetta type of violent conflict involving clans or families and at times communities usually triggered by transgressions of clan / family welfare, honor, ownership and or power. Citing Conflict Alert Report 2020 the highest concentrations were in Lanao del Sur and Maguindanao including the city of Cotabato. Majority of these feuds were fueled by personal and political grudges, and land conflicts, among others. In Maguindanao, feuds erupted in the municipalities comprising the SPMS Box (Shariff Aguak, Pagatin (now Datu Saudi Ampatuan), Mamasapano, and Datu Salibo) and involved groups such as the Moro Islamic Liberation Front (MILF) and the Bangsamoro Islamic Freedom Fighters (BIFF) that fought over land.²⁴

The non-Moro Indigenous Peoples (IPs) comprise about 3-4 percent of the total BARMM population, situated across the 12 municipalities in Maguindanao and Lanao del Sur. The non-Moro IPs in BARMM face multiple security challenges ranging from being caught in the crossfires between state and non-state armed groups, violent harassment of IP communities within the peripheries of MILF and BIFF camps or areas of jurisdictions leading to forced evacuation and eventual occupation of their ancestral lands and summary killings of their tribal leaders.²⁵

Country-level conflict drivers include 1) poverty, lack of opportunities, and further marginalization, 2) a weak justice system, impunity and lack of accountability, lack of transitional justice; 3) human rights violations, killings and harassments of civil society representatives, human rights defenders, and the lack of implementation of indigenous peoples rights; 4) political competitions, the dominance of patronage networks; 5) land dispossession, lack of land recognition, and unequal land tenure system, 6) poor or exploitative models of natural resources management; and 7) the on-going communist insurgency and the unlikelihood of a peace negotiation on this front in the near future.

Conflict triggers country-wide include elections, land grabbing, especially on indigenous lands, resource use exploitation and environmental degradation; disinformation, fake news and red-tagging, unchecked inflation and food shortage, and forced displacement and evacuations to relocation sites during conflicts or climactic events.

Conflict actors in land and resource use conflicts that include smallholder farmers/ producers, indigenous peoples as well as other rights holders, big landowners and investors including private companies/corporations and government, the military, educational institutions and powerful individuals belonging to elevated political or economic positions. Other conflict actors include: the security sector, actors in the justice system, political dynasties with private armies, former and current insurgents, the Communist Party of the Philippines/New Peoples Army/ National Democratic Front (CPP/NPA/NDF) and the National Task Force to End Communist Armed Conflict (NTF-ELCAC).

In BARMM, underfunding and the legacy of long-standing conflict led the region to have the lowest Human Development indicators including in education. About 30 percent of BARMM’s students do not finish the primary

²⁴ World Bank document, BARMM Context (2021)

²⁵ World Bank document, BARMM Context (2021)

education, while only 10 percent complete junior high school on time²⁶. There is a strong correlation between the impact of violent conflict and attainment of better human development outcomes. BARMMs most conflict-affected provinces Maguindanao and Lanao del Sur also register the lowest human development among the provinces in the country²⁷.

The ISRS Project involves various schools across the country. Children often comprise a significant proportion of any crisis-affected population and are considered among the most vulnerable in armed conflict as they are dependent on parents and adults for care and protection. Prolonged conflicts aggravate the situation of hunger and malnutrition among children especially those under five years of age. It is critical for the Project to understand differences in conflict conditions within local areas, and between different regions especially in BARMM. It is also important to understand the specific context down to the barangay level. Barangays in close proximity can have very different conditions (e.g., local elite relations, armed groups and/or ethnic configurations), and these differences can lead to success or failure of a project or action. Similarly, there are important characteristics that are unique to particular regions, including the nature of armed insurgents in the area.²⁸

²⁶ https://Copenstat.psa.gov.ph/PXWeb/pxweb/en/DB/DB__3E__CH__IP/0023E3D2080.px/?rxid=a215c6a2-499f-45a4-a1f4-b37b1c058afe (2015)

²⁷ UNDP, 2021. Philippine Human Development Report 2020/21

²⁸ The Asia Foundation, 2018

5 Environmental and Social Risk Management

This chapter presents the anticipated environmental and social benefits and risks in the implementation of project activities, particularly those related to the various lines of intervention such as repair, rehabilitation, retrofitting and reconstruction of disaster-affected public-school infrastructures. These subprojects are most likely to generate Environmental and Social risk. Site impacts occurring in the pre and construction stages will undergo analysis during the detailed design phase. Measures for addressing these impacts will be outlined in the Environmental and Social Management Plans (ESMPs), Environmental Codes of Practice (ECOPs), and other safeguard instruments. If substantial impacts are identified through the environmental and social screening in Annex 1, the ECOP will be complemented by the Environmental and Social Management Plan (ESMP).

5.1 Risk Assessment Methodology

The assessment of impacts is an iterative process underpinned by four key questions:

- **Prediction:** what change to the bio-physical, chemical or social environment will occur if the project is implemented?
- **Evaluation:** what are the consequences of this change? How significant will its impact be on human and biological receptors?
- **Mitigation:** if it is significant can anything be done about it?
- **Residual Impact:** is it still significant after mitigation?

Where significant residual impacts remain, further options for mitigation will be considered and where necessary, impacts are re-assessed until they are reduced. The table below shows the risk assessment rating system that will be used.

Table 15: Risk Assessment Rating System

		Effects/Consequences						
		Negligible	Small	Medium	High	Very high		
Probability of occurrence	Very likely							
	Likely							
	May occur 50 percent of the time							
	Unlikely							
	Very unlikely							
Overall risk rating of the impact	High		Substantial		Moderate		Low	

5.2 Identification and Assessment of Potential Environmental and Social (E&S) Risks and Impacts

The environmental and social risk classification for the Project is Substantial. The environmental and social risks and impacts of the project mainly relate to school infrastructure reconstruction, retrofitting, rehabilitation and repair activities including site and functional improvements, and acquisition of classroom furniture for reconstructed school buildings. The proposed repair and rehabilitation of about 538 schools and pilot

reconstruction of around 175 schools by DepEd and the major relatively complex works (Repair, Rehabilitation, Retrofitting, Reconstruction) of 690 schools by DPWH with a total of 1,403 schools across the country would broadly involve: (a) Demolition and disposal of building debris (e.g., mortar, bricks, reinforced cement, scrap iron, wood); (b) Site cleaning (jungle clearance, sewage system clearing, damaged fixture disposal); and (c) Civil works, within existing schools of varying sizes (from primary to higher secondary) with durations of approximately 9 to 18 months, depending on the line of intervention.

The environmental risk classification for the Project is substantial. The expected environmental impacts and risks include: a) Construction-related impacts including air, noise, water and soil pollution. Such impacts, while temporary could pose health and safety risks to the students and teachers due to exposure, as the schools would continue to run in temporary shelters within the vicinity and school holiday period would not be sufficient to complete the works; b) Increased risks and impacts associated with sanitation, community health and safety as the proposed activities would involve considerable mobilization of labor in the schools and/or in the community. In addition, there may be traffic and road safety challenges due to incoming heavy equipment and delivery trucks. Some of the schools offer vocational courses which have laboratory facilities. Dismantling such facilities may have hazardous materials; c) Severe pollution and associated risks within and around the immediate vicinity of schools in terms of blocking the waterway and drainage patterns with debris, contamination of water bodies due to clearing of sewers and septage, and construction noise which could impair the learning process and cases of waterborne diseases among others; d) Impacts on the terrestrial and aquatic habitats due to disposal of waste at places where schools are in forested areas or ecologically sensitive areas, and thereby causing biodiversity risks. While the exact number of schools located near the ecologically important locations is currently not known, there would be schools near the sensitive coastal areas and protected forest areas in the rural settings and thus the biodiversity risk cannot be ruled out. Such risks need to be ascertained during project preparation; and e) Operational phase impacts would be mostly related to sanitation and hygiene, and accident potential at schools located adjacent to highways.





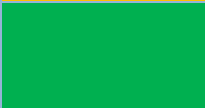

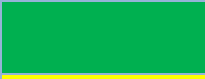





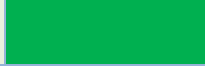

The social risk classification for the Project is substantial. The Project is socially significant in rebuilding infrastructure that facilitates the delivery of basic and secondary education programs. It involves substantial civil works that have social risks and impacts, which could include: a) The siting of workers' camps inside school premises, a common practice gathered from the site visits, could be a risk to children and women given the predominantly male nature of construction work. This may increase the risk of Gender-Based Violence (GBV) and Sexual Abuse and Exploitation (SEA) cases especially among faculty and students; b) Occupational Health and Safety risks among laborers that may include work-related injuries caused by heights and debris falls, spread of communicable disease, workers' camp conditions and heat fatigue during extreme summer heat, and security and safety of workers located in conflict affected area/s ; c) Restrictions to common-use areas in schools could also arise from the cordoning of construction sites and safety zones; d) Temporary disruption of school classes and essential affiliated services (e.g., clinic and library); e) Specific to indigenous peoples (IP) communities and IP-Ed schools- risks related to cultural and tangible and intangible heritage (e.g., school-building designs and sacred sites within schools); f) Community health and safety issues could arise from construction activities causing considerable noise, air, and water pollution, including traffic and road safety risks. In the event that a security force (private or public) will be deployed in the construction site, tensions may arise due to relationship dynamics and legacy issues. For this Project, the 'communities' pertain to people within school premises, adjacent households/communities, and those found along the project right-of-way (ROW), e.g., materials and equipment transport routes; and g) Lack of application of universal access principles could affect vulnerable groups like PWDs and indigenous peoples.

Table 16 below presents the potential risks and impacts per project component activity and the corresponding risk assessment rating.

Table 16: Potential E&S Risks and Impacts

Activities	Potential Risks and Impacts	Risk
Sub-Component 1.1 and 2.1: Detailed Architectural and Engineering Designs (DEDs) and O&M procedures.		
<p>The following are proposed preparatory activities for implementation of Comp. 1.2 and 2.2, which respectively involve <i>Repair, Rehabilitation and Pilot Reconstruction</i>; and <i>Repair, Rehabilitation, Retrofitting, and Reconstruction</i>:</p> <ul style="list-style-type: none"> • Detailed damaged and multi-hazard vulnerability assessments at school building level • Geotechnical and other site investigations. • Architectural and engineering design of repair, rehabilitation interventions and pilot reconstruction, including site and functional improvements. • Engineering oversight of construction works; v) upgrade of school infrastructure operation and maintenance (O&M) manuals and tools. 	<p>While the DED activity itself would not lead to serious risks and impacts, the outcome of DED could lead to potential Environmental Risks due to lack of:</p> <ul style="list-style-type: none"> • Adequate site due diligence to factor in to designs, sensitive natural features such as geography (e.g. vulnerability to erosion), biodiversity areas/protected areas adjacent to the site, native flora, etc. (ESS1) • Assessment of: drainage and relief for site’s vulnerability to flooding, wind patterns and typhoons trend analysis, and seismic vulnerability. (ESS1) • Adequate provisions such as water use and conservation, sanitation and storm water management, ventilation and indoor air quality. These contribute to the health and hygiene within the school premises. (ESS3) • Assessment of expected impacts (e.g., air/noise/water pollution, debris and waste, etc.) due to, pre-construction, construction, and O&M activities. (ESS1) • Consideration of OHS aspects as part of construction and labor management provisions. (ESS2 & ESS4) • Adequate coverage of environmental management and mitigation measures as part of the procurement/bid documents for construction. (ESS1) <p>Social Risks:</p> <ul style="list-style-type: none"> • Lack of due diligence for land acquisition requirements of subproject site. (ESS5) • Inadequate assessment of adverse impact on ancestral domains - land, natural resources, culture and indigenous people’s displacement. (ESS7) • Inadequate assessment of IP communities and IP-Ed schools- risks related to cultural and tangible and intangible heritage (e.g., school-building designs and sacred sites within schools). (ESS7) • Lack of proper information disclosure and conduct of meaning consultations especially in GIDA. (ESS10) 	<p style="background-color: #FFD700; text-align: center;">High</p>

Activities	Potential Risks and Impacts	Risk
	<ul style="list-style-type: none"> Exclusion of disadvantaged and vulnerable population (i.e., students, PWDs and IPs) (ESS10) School Infrastructures rendered inaccessible to vulnerable groups due to design barriers thereby not fully benefiting from the project. (ESS10 and ESS7) Gender disparities in partaking of project benefits (i.e., non-inclusion of separate toilets for girls and boys in the architectural and engineering plans) (ESS10) Lack of integration of labor management procedures in to bidding/contract documents (ESS2) 	
Sub-Component 1.2 and 2.2: Repair, Rehabilitation and Pilot Reconstruction Works; and Retrofitting and Reconstruction Works		
<p>The pre-construction and Construction activities would broadly involve:</p> <p>Activities managed by DepEd:</p> <ul style="list-style-type: none"> Repair and rehabilitation 538 schools (1512 buildings), mostly located in Regions III, IV-B, V, VI, VII, VIII, XII and CARAGA. Pilot reconstruction 180 schools (273 building) located in peri-urban areas where, unlike urban areas. <p>Activities managed by DPWH:</p> <ul style="list-style-type: none"> Approximately 564 school facilities are planned for relatively complex works. estimated that 693 building require retrofitting. 1,242 buildings require reconstruction. 	Environmental Risks:	
	Lack of capacity in E&S risk management (ESS1)	
	Noise and vibration linked to machinery (ESS4 and ESS2)	
	Occupational Health and Safety (OHS) risks from handling equipment, work sites (ESS2)	
	Inadequate PPE and consequent safety risks (ESS 2)	
	Lack of understanding of EHS risks and impacts and of mitigation measures leading to accidents and health impacts (ESS2)	
	Air and Noise pollution respectively due to dust and fugitive emissions from machinery and vehicles; and stagnation of construction wastewater forming cess pools; and inadequate workers sanitation facilities (ESS3)	
	Generation of solid wastes mainly due to construction debris, scrap steel, and discarded furniture during construction leading to air, water and land pollution. (ESS3)	
	Soil erosion (ESS3)	
	Water quality degradation of nearby waterways in case of improper disposal of the construction debris which may find its way to nearby water course (ESS3)	
Improper disposal of e-waste (mainly electrical) contributing to the pollution of land, water, soil, and air which in turn could lead to substantial health risks (ESS3)		
Risk of blocking of roads due to movement of construction vehicles (ESS1)		
Inadequate post-construction clean up		
Impacts on critical habitats and biodiversity (ESS6)		

Activities	Potential Risks and Impacts	Risk
<ul style="list-style-type: none"> Other 833 school buildings will require either repair or rehabilitation. <p>The Interventions are mostly concentrated in CAR, Regions III, V, VI, VII, VIII, XI, XII and CARAGA.</p>	Social Risks: Implementers' limited understanding of risks and impacts of sub-projects (ESS1)	
	Inadequate Stakeholders engagement and Lack of access to GRM (ESS10)	
	Temporary disruption and relocation of school classes and essential affiliated services (e.g., clinic and library). Restrictions to common-use areas in schools could also arise from the cordoning of construction sites and safety zones. (ESS1 & ESS4)	
	Occupational Health and Safety risks among laborers that may include work-related injuries caused by heights and debris falls, spread of communicable disease, workers' camp conditions and heat fatigue during extreme summer heat and potential security risks in conflict-affected areas (ESS2)	
	Security as a contextual risk for schools in conflict-affected areas and/or GIDA and also Lack of safety and security for project workers, project-affected persons and assets (ESS2 and ESS4).	
	Risks associated with hiring security personnel (ESS4)	
	Violations of labor and working conditions, Risk of Child labor and forced labor (ESS2); Risk of labor influx (ESS2 & 4)	
	Risk of GBV and SEA-SH in construction sites and workplaces especially among students and women (ESS2 and ESS4)	
	Vehicular traffic during facility construction and operation may potentially cause congestion on the local routes, generate noise, and pose safety hazards for the local population, particularly for children and elderly people, Risk of community health and safety on possible accidents due to poor safety protocols or measures being undertaken in the construction site (ESS4)	
	Chance Findings and/or cause damage on cultural and historical artifacts (ESS8)	
	Inadequate stakeholder engagement (ESS10)	
Project Completion and Turn over; and Operation and Maintenance	Environmental Risks: Abandoned construction site without proper disposal of construction waste/debris and scrap Material (ESS1 and 3)	
	Incomplete works relating to associated contracts for example, landscaping, fixing of solar panels, furniture supplies, etc. which could cause disturbances to the schools operation (ESS3)	
	Operation and maintenance of water supply, and sanitation including septage disposal, though periodic (ESS3)	

Activities	Potential Risks and Impacts	Risk
	Social Risks: Unresolved disputes or grievances from a particular stakeholder leading to non-concurrence or approval of the completion and acceptance of the project (ESS10) Contractors' unsettled utility bills (i.e., electricity charges during construction period) charged to the school (ESS?)	<div style="background-color: yellow; height: 100px;"></div>
Component 3 Project Management, Monitoring and Evaluation		
The proposed activities will include: Regular supervision, E&S due diligence, integration of E&S considerations in design and implementation plans, periodic monitoring, implementation capacity building of stakeholders including Regional office staff of DepEd, DPWH, Contractors, School administration, and community	Environmental and Social Risks: Lack of timely deployment of E&S specialists and Occupational Health and Safety specialist Inadequate capacity building/awareness creation in stakeholders about the need for E&S risk management Lack of timely reporting and monitoring with relevant course correction measures	<div style="background-color: orange; height: 100px;"></div>

5.3 Planning and Design Considerations for Avoidance of Environmental and Social Risks and Impacts

The bottom-line of assessing environmental and social risks is to be able to come up with appropriate risk management measures that should be considered in project planning and design. To avoid anticipated sub-project adverse risks and impacts that are difficult to manage, an exclusion list have been developed and further discussed as part of the procedures in Chapter 6. For example, areas within critical habitats and biodiversity areas and those that would involve land acquisition will not be included in the project. Beneficiary schools of the Project are currently on government owned land and/or must have secure land tenurial arrangements (TCT, Deed of Donation). School facilities needing relocation due to exposure to high hazard prone areas would not be financed by the project but by the government’s regular programs.

There will be cases of selected schools located in ancestral domains that will benefit its IP learners. There is low risk for the project to have adverse impacts on IPs however the Project will implement the necessary consultation processes with concerned IP communities as stipulated in the SEP during the planning and design stages and all-throughout the project cycle.

For all lines of intervention, the project will use a Screening Form in Annex 1 to identify and assess potential environmental and social risks and impacts, and appropriate mitigation measures. In this case, the potential environmental and social risks and impacts can be avoided and/or minimized early on during subproject planning and design.

5.4 Potential Environmental and Social (E&S) Benefits of the Project

Overall, the Project will benefit learners, school personnel and community members through providing support towards the resilient recovery of disaster-affected schools across the country. The various lines of intervention of the project will improve the performance of the school infrastructure in overcoming future hazard events. Resilient recovery of disaster-affected schools also entails the functional continuity of the network of schools and the ability of the education system to reduce the disruption in the delivery of services. Thereby providing a safe, secure, conducive and universally accessible learning environment for all types of learners. The resilient recovery of the selected disaster-affected schools shall improve the teaching and learning process and learning recovery in the aftermath of a disaster. The potential environmental and social benefits of the Project per project component activities are listed below in Table 18.

Table 17: Potential Environmental and Social Benefits

Project Activities	Potential Environmental Benefits	Potential Social Benefits
Detailed Architectural and Engineering Designs	School Infrastructure reconstructed, repaired, rehabilitated, and/or retrofitted conform to the latest and governing codes and environmental laws Preservation of existing structures contribute to resource conservation and reduce waste generation	School Infrastructure completed under the project are calamity resilient, minimizing if not eliminating casualties, injuries and other accidents that may happen during calamities. Resilient school facilities provide protection to the learners, school personnel and community in times of disaster or even in post disasters.
Procurement of Works	Selected designer and contractor have high morale and respect to the	Transparency in the conduct of each procurement activity creates trust

Project Activities	Potential Environmental Benefits	Potential Social Benefits
	<p>environment and are compliant to the procurement requirements thereby avoiding and/or minimizing possible destruction or pollution of the environment.</p> <p>Responsible procurement practices that prioritize both the immediate project needs and environmental stewardship such as sustainable materials, energy-efficient equipment and local sourcing to reduce transport impact.</p>	<p>and confidence of the various stakeholders to all DepEd and DPWH personnel who are in-charge of conducting procurement activities. Contracted firms also adhere to strict labor standards including observance to Occupational Health and Safety, anti-trafficking and anti-child labor, including their primary suppliers. Consequently, this will minimize occurrence of injuries and deaths among workers as well as safety and well-being of the community.</p>
Actual Construction / Repair/ Rehabilitation or Retrofitting Works	Guided by the ESMF, the contractor complies with all the regulatory requirements and necessary permits needed to ensure the smooth and faster completion of the project while maintaining environmental safeguards during construction.	<p>Learners, school personnel and other stakeholders increased trust and confidence to the national government in the timely completion and excellent quality of works of the contractors.</p> <p>Mitigation measures and actions create safer and secure social environment for students, teachers and parents, and minimize potential tensions among the contractors and the school and immediate community.</p>
Project Management, Monitoring and Evaluation	ESMF is properly implemented in the project and its regular monitoring and evaluation provides environmental benefits by improving implementation or providing more stringent measures thereby better protection is given to the environment.	<p>Stakeholders' feedback are being considered by the Project Management Team thereby providing assurance to stakeholders that they are important in the decision making process of the project.</p> <p>The project GRM will strengthen trust and collaboration among stakeholders through the effective management of complaints and feedbacks</p>

5.5 Mitigation Measures and Risk Management

Having identified the impacts and risks, appropriate mitigation and risk management measures have to be integrated into the project plans and design. In line with WB ESS1, the Project is adopting the following mitigation hierarchy approach:

- Anticipate and avoid risks and impacts.
- Where avoidance is not possible, minimize or reduce risks and impacts to acceptable levels;
- Once risks and impacts have been minimized or reduced, mitigate.
- Where significant residual impacts remain, compensate for or offset them, where technically and financially feasible.

Environmental and social management plan (ESMP) is an instrument under WB's ESF that details (a) the measures to be taken during the implementation and operation of a project to eliminate or offset adverse environmental and social impacts, or to reduce them to acceptable levels; and (b) the actions needed to implement these measures. Based on the procedures discussed in Chapter 6 and the screening, for sub-projects that are expected to have moderate to high impacts/risks, an ESMP has to be prepared. Annex 2 provides a template for ESMP which lists the prevention, minimization, mitigation and compensation measures for risks and impacts at various stages of project development and implementation. The ESMP template presents standardized management and mitigation procedures for handling environmental and social risks expected from sub-projects.. It provides guidance on managing risks and impacts throughout the project life cycle considering international industry best practices. Risks and Mitigation Measures Specific to Disadvantaged and Vulnerable Groups

Project processes may inadvertently exclude vulnerable and disadvantaged groups if the necessary mitigation measures are not put in place. Vulnerable groups or individuals refer to those who may be more likely or at a higher risk to be adversely affected by the subproject impacts and/or more limited than others in their ability to take advantage of the project benefits or participate in consultation processes. Vulnerable groups are placed at a disadvantaged position as a result of the barriers they experience to social, economic, political and environmental resources, as well as limitations due to illness or disability. Vulnerable and disadvantaged groups may comprise children, persons with disabilities/learners with special educational needs and indigenous peoples.

Inclusion of disadvantaged and vulnerable groups in consultation processes. Meaningful consultations with identified vulnerable and disadvantaged groups will be undertaken during the whole project cycle from planning and design to implementation and monitoring to ensure that risks and impacts are identified, avoided and/or mitigated. Site-specific consultation processes will be integrated in Project activities, as per SEP. A School-based Project Committee will be established composed of at least the school principal, barangay chairman or representative from the barangay, representatives from the general parent-teacher association (parents and teachers), representatives from the student council, and the school DRR head or school facilities or custodian. This is to consult and involve the main stakeholders in the planning, implementation, and monitoring of the project interventions since they are the main beneficiaries. The school-based project committee will ensure that the recommendations and concerns of the school's vulnerable population are taken into consideration in the final infrastructure design and in the implementation of the project.

Indigenous Peoples. The Project includes benefitting indigenous peoples communities whereas the school infrastructures to be repaired, rehabilitated, retrofitted or reconstructed are located within an ancestral domain and/or with Indigenous Peoples learners covered under the DepEd's Order no, 62 series of 2011 or the National Indigenous Peoples' Education Policy Framework. Building on DepEd's experience in conducting IP consultations along with the National Commission on Indigenous Peoples (NCIP), the Project will ensure the participatory processes are in place in line with DepEd Order 34 s 2017 Guidelines on the Formation of Consultative and Advisory bodies on Indigenous Peoples Education (IPEd) in Regions Implementing the IPEd Program and in accordance with the project's SEP.

Application of universal access and gender inclusive design. The Project shall ensure that during the planning and design stage the needs of disadvantaged groups such as persons with disabilities/learners with special educational needs will be incorporated ensuring compliance to universal accessibility and gender inclusive design such as providing WASH facilities for girls and women. The application of universal design principles ensures that the design and composition of an environment can be accessed,

understood, and used to the greatest extent possible by all people regardless of their age, size, ability or disability, gender, ethnicity. The ESMP shall include mitigating measures to address risks of exclusion of the needs of the vulnerable population (i.e. follow BP 344 Accessibility Law, IPRA law and DepEd Order no. 62 series of 2011 to ensure culturally appropriate design and DepEd Order no.10 s 2016 Policy and Guidelines for the comprehensive Water, Sanitation and Hygiene in Schools (WINS) Program).

Prevention of Gender-based Violence (GBV) and Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH) especially among students and women. The Project will aim to prevent GBV and SEA/SH risks through measures listed in the ESMP Template (see Annex 2) including the conduct of advocacy and awareness raising activities on GBV for students and teachers and other stakeholders. Protocols for early detection of GBV and SEA/SH will be developed building on the existing systems of DepEd as per DepEd Order 32 s of 2017 Gender Responsive Education Policy (which includes a provision to establish VAWC desk in schools); DepEd Order 40 s 2012 Child Protection Policy and DepEd Order 35 s 2004 Revision of the Grievance Machinery at the DepEd. The project will provide mechanisms to redress GBV and SEA/SH cases through the Project GRM that ensures a survivor-centered approach in addressing such cases.

Temporary classrooms during construction. The following are the guidelines on selecting areas for temporary classrooms keeping in mind the safety of all types of learners and the environment conducive to learning:

- The site shall be set up within the school compound in available rooms and areas of the school building that are not subject to repair, rehabilitation, retrofitting and/or reconstruction.
- Ensure that there is provision for mobility of disabled persons at the temporary site.
- Ensure that the temporary classroom has easy access to toilet facilities for girls and boys with adequate water and sanitation provisions.
- Ensure that the temporary area is provided with adequate lighting and ventilation.
- Avoid locating the temporary classrooms near the main entrance where vehicles and materials delivery and other construction services may take place.
- Select a site with roofing or shade to protect teachers and students from exposure to sun or rain.
- Examine safety of the site and check against any hazardous areas such as noisy areas, falling debris, diggings, open electrical wires, and dusty surroundings.
- Provide temporary barricade for the classroom.
- Implementing agencies (DepEd and DPWH) to discuss with the school administration and stakeholders the implementation of flexible class schedules such as class shifts, weekend classes, and extension of classes during school breaks, or conduct of online classes or modular classes.

6 Procedures and Implementation Arrangements

6.1 Environmental and Social Risk Management Procedures

The identification and management of environmental and social risks will be mainstreamed into the overall Project management procedures including the subproject selection process. This means that the timing of safeguards activities will be synchronized with how subprojects will be clustered together for screening, contracting and construction. In summary, the procedures aim to do the following:

- Integration of environmental and social objectives into the detailed engineering design as part of the planning process.
The Terms of Reference (TOR) or relevant contractors shall reflect environmental and social objectives in their respective scope of work.
- Preparation of site-specific safeguards plans by contractor during the bidding process.
- Manage expectations through appropriate methods of stakeholder engagement and information disclosure.
- Strengthen institutional capacity on environmental and social safeguards through appropriate capacity building on E&S implementation, monitoring & evaluation and reporting.

In summary, the procedures are listed in the following Table. The details for each stage are discussed in turn in succeeding sections.

Table 18: Project Cycle and E&S Management Procedures

Project Stage	E&S Stage	E&S Management Procedures
a. Assessment and Analysis: Subproject identification	Screening	<ul style="list-style-type: none"> • During subproject identification, ensure subproject eligibility by referring to the Exclusion List below for E&S Risks • For all identified eligible sub-project, use the Screening Form in Annex 1 to identify and assess potential environmental and social risks and impacts, and identify the appropriate mitigation measures for consideration in the subproject planning and design. • Identify the documentation, permits, and clearances required under the government’s Environmental Regulation guided by Chapter 3 of this ESMF
b. Formulation and Planning: Planning for subproject activities, including human and budgetary resources and monitoring measures	Planning	<ul style="list-style-type: none"> • Based on results of screening based on Screening Form 1, identify relevant environmental and social procedures and plans to be incorporated in the contractor bidding documents; orient contractors on relevant procedures and plans • For activities requiring Environmental and Social Management Plans (ESMPs), ESMPs should be submitted for prior review and no objection by the World Bank prior to initiating bidding processes (for subprojects involving bidding processes) and/or launching activities (for subproject activities not subject to bidding). • Ensure that the contents of the ESMPs are shared with relevant stakeholders in an accessible manner and consultations are held with the affected communities in accordance with the SEP. • Complete all documentation, permits, and clearances required under the government’s Environmental and Social Regulations. • Train staff responsible for implementation and monitoring of plans.

Project Stage	E&S Stage	E&S Management Procedures
c. Implementation and Monitoring: Implementation support and continuous monitoring for projects	Implementation	<ul style="list-style-type: none"> • Ensure implementation of plans through site visits, regular reporting from the field, and other planned monitoring. • Track grievances/beneficiary feedback. • Continue awareness raising and/or training for relevant staff, volunteers, contractors, communities.
d. Review and Evaluation: Qualitative, quantitative, and/or participatory data collection on a sample basis]	Completion	<ul style="list-style-type: none"> • Assess whether plans have been effectively implemented. • Ensure that physical sites are properly restored. • ensure that appropriate systems are in place for sustained implementation of E&S Risk Management System

More detailed discussions for each stage is provided below. In the following sections, the environmental and social management procedures that will be applied to the project, responsible parties, and timeframes are described.

6.1.1 Subproject Assessment and Analysis – E&S Screening

To avoid adverse environmental and social risks that cannot be adequately mitigated, are too costly to mitigate or are prohibited by the national or world bank policy, the following E&S Exclusion List should be considered in the sub-project selection.

Table 19: E&S Exclusion List

<ul style="list-style-type: none"> • Any construction in protected areas or priority areas for biodiversity conservation, as defined in national law • Activities that have the potential to cause any significant loss or degradation of critical natural habitats, whether directly or indirectly, or which would lead to adverse impacts on natural habitats • Purchase or use of banned/restricted pesticides, insecticides, herbicides, and other dangerous chemicals (banned under national law and World Health Organization (WHO) category 1A and 1B pesticides) • Construction of any new dams or rehabilitation of existing dams including structural and or operational changes; or irrigation or water supply subprojects that will depend on the storage and operation of an existing dam, or a dam under construction for the supply of water • Activities that involve the use of international waterways • Any activity affecting physical cultural heritage such as graves, temples, churches, historical relics, archeological sites, or other cultural structures • Activities that may cause or lead to forced labor or child abuse, child labor exploitation or human trafficking, or subprojects that employ or engage children, over the minimum age of 14 and under the age of 18, in connection with the project in a manner that is likely to be hazardous or interfere with the child’s education or be harmful to the child’s health or physical, mental, spiritual, moral, or social development • Any activity on land that has disputed ownership or tenure rights • Subprojects that will require land acquisition • Subprojects that will cause physical and/or economic relocation/displacement associated with land acquisition or will require the use of eminent domain • Any activity with significant environmental and social risks and impacts that require an Environmental and Social Impact Assessment (ESIA) • Subprojects that will have adverse impact on ancestral domains such as land, natural resources, culture and Indigenous peoples’ displacement
--

Sub-projects that are not in the exclusion list shall then be subjected to E&S Screening. As part of the screening process, the technical design team and environment and social safeguards specialist(s) in coordination with the Project Implementing Unit (PIU), will work jointly during site investigation prior to selection of the design of the infrastructure intervention. The environment and social safeguards specialist together with the PIU shall identify potential environmental and social issues and assess the severity of potential impacts at the selected site such as:

- Site sensitivities (flooding, proximity to residential areas, hospitals, clinics, places of worship, and historical/cultural site)
- Geology/soils (soil erosion, liquefaction, proximity to fault line, landslides)
- Terrestrial Biology (if project will result to cutting of trees)
- Hydrology (change in drainage flow, inducement of flooding, clogging of canals, sedimentation of creeks/rivers)
- Water resources and utility services (disruption of water supply and electricity, impact on sanitation and sewerage services)
- Waste generation (domestic sewage, non-hazardous solid waste and construction debris, asbestos materials, spent welding electrode rods, paints, adhesives, polymers and other chemicals)
- Air quality/noise/vibration including dust, fumes from adhesives, polymers, and welding activities
- Road and traffic safety (blocking of road access, reduced open space)
- Social impacts (displacement of students, patients, and small businesses, disruption of medical services and classes)
- Public health (effect on community health and safety including sexual harassment and gender-based violence (GBV), spread of COVID-19 and other communicable diseases, effect on occupational health and safety).

Consultations with the building administration and its engineering team will be undertaken to further identify environmental and social issues related to the design and implementation of the building infrastructure intervention such as schedule and disruption of building services, availability of area for construction materials and related activities and other obstructions. The environment and social safeguards specialist will also identify any community issues related to the project by consulting with local communities and authorities, determining incidences of flooding, availability of road access and materials stockpile area, proximity to sensitive receptors such as residential community and religious places, presence of cultural/historical sites, and any canal or waterway, trees, and economic enterprises (e.g. canteen) that may be affected. The environmental and social screening process will inform the design team on what measures or actions are needed to avoid, minimize or mitigate these potential impacts and risks. Annex 1 provides a Environmental and Social Safeguard Screening Checklist that can be used for documenting sub-project screening... Based on the results of the site evaluation and stakeholder consultations and the accomplishment of the *Screening Form* the various ESF instruments and plans that may be relevant for the specific sub-projects shall be identified.

In general, repair, rehabilitation and retrofitting works have manageable environmental and social impacts that can be addressed through the Environmental and Social Codes of Practice (ES COP) (Annex 3). The ESCOP and the Construction Safety and Health Program (CSHP) are the standard safeguards tool for all construction activities and additionally, the ESMP will be developed, as applicable for projects with moderate to higher risk. The LMP and SEP will be applied to all subprojects and there is no need to develop distinct LMPs or SEPs for individual subprojects. The ECOP/ESMP covers the World Bank Group

Environment, Health and Safety (EHS) General Guidelines in managing EHS issues during the construction works. Table 22 describes the applicability of the different safeguard plans.

Table 20: E&S Instruments and their Applicability

ES Instruments	Applicability
Environmental and Social Management Plan (ESMP)	The ESMP applies to subprojects that generates medium to high impacts. The construction impacts are site-specific and in most cases are manageable. The ESMP contains specific subplans such as the waste management plan (particularly activities generating hazardous waste materials such as asbestos), construction safety and health plan, construction materials transport and storage plan, relocation plan of affected classrooms, traffic management, chance find procedures, and stakeholder engagement plan. The template of the ESMP is outlined in Annex 2.
Waste Management Plan (WMP)	The waste management plan is a subplan contained in the ECOP/ESMP. This applies to the generation of non-hazardous wastes such as construction debris and hazardous wastes such as used oil, asbestos materials, empty containers of chemicals, solvents, paints, and adhesives.
Construction Safety and Health Program (CSHP)	The CSHP is a set of measures to cover the processes and practices to be utilized at the construction project site by the contractor to comply with the requirements of the Occupational Safety and Health Standards (OSHS) of the Department of Labor and Employment (DOLE). The CSHP is a standard requirement for bidders as required by DPWH Order No. 13, series of 1998 and therefore applies to all subprojects. It contains specific provisions on safety and health of workers, job hazard analysis, wearing of PPEs, workers skills and certification, emergency response, materials and waste handling, protection of general public, and grievance redress mechanism to address workers complaints, among others.
Labor Management Procedures (LMP)	The LMP is consistent with the national labor laws and policies and standards occupational safety and health and the WB Environmental and Social Standards ESS2 provisions addressing labor risks and issues that may arise during implementation of the project. The LMP includes GRM for project workers. This will be applied to all subprojects.
Stakeholder Engagement Plan (SEP)	The SEP applies to all subprojects to guide consultations with key stakeholders throughout the different stages from subproject design to implementation. The SEP also contains a GRM for stakeholders which applies to the Project.
Grievance Redress Mechanism (GRM)	The GRM is applicable to subprojects where there are affected parties, community members, and other interest groups that may be adversely affected by the implementation of the subproject.
Chance Find Procedure (CFP)	The CFP applies to subprojects that would require excavation activities. The CFP aims to conserve any artifact that may be accidentally discovered during excavation activities following the requirements of the National Commission on Culture and Arts. This is found as a subplan in the ECOP.

6.1.2 Subproject Formulation, Planning and development of E&S Documents

Based on the results of the site evaluation, stakeholder consultations and the accomplishment of the Screening Form, the necessary ESF subproject instruments described in the preceding section shall be prepared taking into consideration the issues identified with guidance provided in the relevant annexes. The documentation, permits, and clearances required under the relevant government’s Environmental Regulation shall be identified as guided by Chapter 3 of this ESMF and preferably conduct the necessary studies and prepare the necessary documentation in parallel with the project preparation activities.

–If certain subprojects or contracts are being initiated at the same time or within a certain location, an overall ESMP covering multiple subprojects or contracts can be prepared. Some subprojects with relatively higher risk such as substantial risk subprojects shall benefit from the preparation of a site-specific environmental and social assessment prior to the preparation of an ESMP.

In situations where cluster of subprojects will be involved in one bid and where a contractor will be working simultaneously on more than one subproject in different locations, the ESMP to be prepared by the Contractor should also detail the implementation of mitigation measures associated with the transport and movement of materials to subproject sites, management of construction camp(s) and materials storage area, capacity and resources for safeguards, and the means of monitoring and reporting of any environment, health and safety incidents.

Relevant provisions in the various E&S Risk Management instruments developed as well as government permit conditions and related requirements shall be integrated as part of the selection criteria in the bidding process and likewise integrated in the detailed engineering design (DED).

6.1.3 Review, Approval, and Disclosure of E&S Documents

The Buildings and Special Project Management Cluster (BSPMC) of the DPWH and the Education Facilities Division (EFD) of the School Infrastructure and Facilities Office of the DepEd shall supervise the preparation and initial review and approval of E&S documents. Relevant stakeholders and affected communities shall be consulted on the environmental and social risks identified and mitigation measures. E&S documents for all such subprojects will be submitted to the WB for review, clearance, and public disclosure. In the case of low to moderate categories of subprojects, the first ESMPs will be submitted to the World Bank for prior review and no objection. After that, the World Bank and the Buildings and Special Project Management Cluster (BSPMC) of the DPWH and the Education Facilities Division (EFD) of the School Infrastructure and Facilities Office of the DepEd will reassess whether prior review is needed for further ESMPs or a certain category of ESMPs (for example, for activities exceeding a certain budget, for certain types of activities).

The BSPMC-UPMO of the DPWH and the EFD of the DepEd will also complete the documentation, permits and clearances required under the government’s Environmental Regulation before any project activities begin.

At this stage, staff who will be working on the various subproject activities should be trained in the environmental and social management plans relevant to the activities they work on. The BSPMC-UPMO-UPMO of the DPWH and the EFD of the DepEd should provide such training to field staff.

The BSPMC-UPMO of the DPWH and the EFD of the DepEd should also ensure that all selected contractors, subcontractors, and vendors understand and incorporate environmental and social mitigation measures relevant to them as standard operating procedures for civil works. The BSPMC-UPMO of the DPWH and the EFD of the DepEd should provide training to selected contractors to ensure that they understand and incorporate environmental and social mitigation measures; and plan for cascading training to be delivered by contractors to subcontractors and vendors. They should further ensure that the entities or communities responsible for ongoing operation and maintenance of the investment have received training on operations stage environmental and social management measures as applicable.

6.1.4 Implementation and Monitoring – E&S Implementation

During implementation, the BSPMC-UPMO of the DPWH and the EFD of the DepEd will conduct regular monitoring visits. Describe the mechanisms, responsible parties, and the frequency for project supervision. Consider whether mobile devices can be used for monitoring of projects with numerous subproject locations. If there are contractors implementing subproject activities, the contractors will be responsible for implementing the mitigation measures in the E&S risk management documents, with BSPMC-UPMO and EFD oversight.

The BSPMC-UPMO and EFD working to implement the project will ensure that monitoring practices include the environmental and social risks identified in the ESMF and will monitor the implementation of E&S risk management mitigation plans as part of regular project monitoring. Annex 2 which is on ESMP provides examples of monitoring parameters.

At a minimum, the reporting will include (i) the overall implementation of E&S risk management instruments and measures, (ii) any environmental or social issues arising as a result of project activities and how these issues will be remedied or mitigated, including timelines, (iii) Occupational Health and Safety performance (including incidents and accidents), (iv) community health and safety, (v) stakeholder engagement updates, in line with the SEP, (vi) public notification and communications, (vii) progress on the implementation and completion of project works, and (viii) summary of grievances/beneficiary feedback received, actions taken, and complaints closed out, in line with the SEP. Reports from the local levels will be submitted to the BSPMC-UPMO of the DPWH Central Office and the Office of the Undersecretary for School Infrastructure and Facilities (OUSIF) of the at the national level, where they will be aggregated and submitted to the World Bank on a quarterly [or biannual] basis.

Throughout the Project implementation stage, the BSPMC-UPMO and EFD will continue to provide training and awareness raising to relevant stakeholders, such as staff, selected contractors, and communities, to support the implementation of the environmental and social risk management mitigation measures. An initial list of training needs is proposed below, in Section 6.3.

The BSPMC-UPMO and EFD will also track grievances/beneficiary feedback (in line with the SEP) during project implementation to use as a monitoring tool for implementation of project activities and environmental and social mitigation measures.

Last, if the BSPMC-UPMO and/ or the EFD becomes aware of a serious incident in connection with the project, which may have significant adverse effects on the environment, the affected communities, the public, or workers, it should notify the World Bank within 48 hours of becoming aware of such incident. A fatality is automatically classified as a serious incident, as are incidents of forced or child labor, abuses of community members by project workers (including gender-based violence incidents), violent community protests, or kidnappings.

6.1.5 Review and Evaluation – E&S Completion

Upon completion of Project activities, the [responsible party in the implementing agency] will review and evaluate progress and completion of project activities and all required environmental and social mitigation measures. Especially for civil works, the [responsible party in the implementing agency] will monitor activities regarding site restoration and landscaping in the affected areas to ensure that the activities are done to an appropriate and acceptable standard before closing the contracts, in accordance with measures identified in the ESMPs and other plans. The sites must be restored to at least the same

condition and standard that existed prior to commencement of works. Any pending issues must be resolved before a subproject is considered fully completed. The BSPMC-UPMO and EFD will prepare the completion report describing the final status of compliance with the E&S risk management measures and submit it to the World Bank.

6.2 Technical Assistance Activities

The BSPMC and EFD ensure that the consultancies, studies (including feasibility studies, if applicable), capacity building, training, and any other technical assistance activities under the Project are carried out in accordance with Terms of Reference acceptable to the Bank, that are consistent with the ESSs. They will also ensure that the outputs of such activities comply with the Terms of Reference.

6.3 Contingency Emergency Response Component

The Contingency Emergency Response Components (CERC) Manual to be prepared for the Project will include a description of the environmental and social risk assessment and management arrangements if the CERC component becomes activated. This may include a CERC ESMF or an Addendum to this ESMF based on the subproject activities that will be funded under the CERC component. If such additional documentation or revision to documentation is needed, the [responsible party in the implementing agency] will prepare, consult, adopt, and disclose these in accordance with the CERC Manual, and implement the measures and actions necessary.

6.4 Implementation Arrangements

The table below summarizes the roles and responsibilities regarding the implementation arrangements for **environmental and social management**.

Table 21: Roles and Responsibilities for Environmental and Social Risk Management

Level/ Responsible Party	Roles and Responsibilities
National Level DPWH-BSPMC-UPMO DepEd-SIF-EFD	<ul style="list-style-type: none"> - Provide overall support, oversight, and quality control to field staff working on environmental and social risk management. - Collect, review, and provide quality assurance and approval to Screening Forms and ESMPs as relevant while keeping documentation of all progress. - Oversee implementation and monitoring of environmental and social mitigation and management activities, gather and review progress reports from local levels/subprojects, and report the same to the World Bank on a quarterly [or biannual] basis. - Train the central and field staff including the contractors responsible for implementing the ESMF. - For centrally-managed contracts, ensure that all bidding and contract documents include all relevant E&S management provisions per screening forms, ESMPs, and ESCOPs. - Manage the overall GRM processes, monitoring, review and evaluation including the establishment of the GRM Platform dedicated for the project that will track the status of resolution of the issues and concerns raised by various stakeholders from the school up to the central office level.

Level/ Responsible Party	Roles and Responsibilities
Regional/Local Level DepEd Regional Director, Assistant Regional Director, Regional Engineer, Division Engineer	<ul style="list-style-type: none"> - Ensure project activities do not fall under the Negative List. Fill out Screening Forms for relevant subproject activities and submit forms to the national level. - If relevant, complete site-specific ESMPs for subproject activities and submit forms to the national level. - Oversee daily implementation and monitoring of environmental and social mitigation measures and submit monthly progress and performance report to the national level . - Provide training to local contractors and communities on relevant environmental and social mitigation measures, roles, and responsibilities. - For regionally managed contracts, ensure that all bidding and contract documents include all relevant E&S management provisions per screening forms, ESMPs, and ESCOPs. - On GRM, consolidate and provide resolution on various issues and concerns raised by various stakeholders.
Local contractors	<ul style="list-style-type: none"> - Comply with the Project’s environmental and social mitigation and management measures as specified in ESMPs, ESCOPs, and contract documents, as well as national and local legislation. - Take all necessary measures to protect the health and safety of workers and community members, and avoid, minimize, or mitigate any environmental harm resulting from project activities. - Ensure that complaints received by the school, division office, regional office or the central office, directly related to the project, are properly addressed and resolved within the agreed time frame.

6.5 Reporting Arrangements

The E&S performance will be included in the subproject and Project progress reports. [Responsible implementing agency] with the assistance from the [refer technical consultant or supervision consultant] will include E&S performance report at subproject level to [National Project Management unit] periodically. At the project level, [National Project Management Unit] will prepare E&S performance report on a quarterly basis for submission to the World Bank describing the Project progress and compliance with the ESMF and other E&S requirements. The reporting arrangements are described in Table 22.

Table 22: Summary of Reporting Arrangements

	Report Prepared by	Submitted to	Frequency of Reporting
1	Contractor	Construction Management and Supervision (CMS)	Once before construction commences and every 25 th of the month thereafter
2	Construction Management and Supervision (CMS)	National Project Management Office (PMO)	Monthly (cc. RO and SDO)
3	National Project Management Office (PMO)	Project Director	Monthly (cc. EFD and PMS)
4	Project Director	SIMO	Monthly

5	SIMO	Office of Usec. For Infrastructure and Facilities (OUSIF)	Monthly
6	Office of Usec. For Infrastructure and Facilities (OUSIF)	WB	Quarterly
7	Community Monitoring	DPWH BSPMC-UPMO /DepEd Schools Division Superintendent	On instances where a complaint has been filed relative to the subproject E&S implementation

The DepEd and DPWH’s periodic monthly report on E&S performance/compliance of the subproject and preparation of subproject E&S documents should be maintained. The progress report shall submitted to the National Project Management Unit before each project implementation support mission and must include sufficient information on: i) preparation and disclosures of E&S instruments for subprojects; ii) incorporation of new subproject ESMPs in the bidding and contractual documents; iii) monitoring and supervision of ESMP implementation by the contractor, the construction supervision engineer, and the PMBs; iv) any challenges in E&S implementation, solutions, and lessons learned.

6.6 Proposed Training and Capacity Building

For effective and efficient implementation of the needed environmental and social risks/impacts management measures, concerned staff shall undergo appropriate and sufficient capacity building. Table 23 summarizes the proposed training and capacity building approach

Table 23: Proposed Training and Capacity Building Approach

Level	Responsible Party	Audience	Topics/Themes that May Be Covered
National level	World Bank	National staff responsible for overall implementation of ESMF	ESMF and approach: <ul style="list-style-type: none"> - Identification and assessment of E&S risks - Selection and application of relevant E&S risk management measures/instruments - E&S monitoring and reporting - Incident and accident reporting - Application of LMP, including Code of Conduct, incident reporting, SEA/SH, COVID-19 mitigation - Application of SEP and the grievance/beneficiary feedback mechanism
Regional level	National staff	Regional staff Contractors	ESMF and approach: <ul style="list-style-type: none"> - Identification and assessment of E&S risks - Selection and application of relevant E&S risk management measures - E&S monitoring and reporting - Incident and accident reporting - Application of LMP, including Code of Conduct, incident reporting, SEA/SH, COVID-19 mitigation - Application of SEP and the grievance/beneficiary feedback mechanism
Local/site level	Regional staff	Local staff	- Application of SEP and the grievance/beneficiary feedback mechanism

Level	Responsible Party	Audience	Topics/Themes that May Be Covered
		Local contractors	<ul style="list-style-type: none"> - Application of LMP, including Code of Conduct, incident reporting, SEA/SH, COVID-19 mitigation - Application of ESCOPs or ESMPs, as relevant
Community level	Local staff	Community members Community Workers, if relevant	<ul style="list-style-type: none"> - Basic OHS measures and Personal Protective Equipment - Community health and safety issues - Worker Code of Conduct - SEA/SH issues, prevention, measures] - COVID-19 mitigation - Grievance redress - Workers' grievance redress

6.7 Estimated Budget

ESMF Implementation budget includes budget for hiring of environmental and social specialists, trainings, site validation/visits, data collection and consultations/FGDs, travel expenses, printing of awareness raising materials and other related logistical requirements. Table 25 lists estimated cost items for the implementation for the ESMF, which have been included in the overall project budget.

Since the technical details of the sub projects have not yet been finalized, an estimated lump sum amount has been allocated for the implementation of the ESMF as presented in Table 8. The ESMF budget will be updated once the sub project components have been finalized.

Table 24. ESMF Implementation Budget

Activity/Cost Item	Potential Cost (USD)
Trainings for staff (venue, travel, refreshments etc.)	\$100,000.00
Trainings for contractors (venue, travel, refreshments, etc.)	\$50,000.00
Printing of awareness raising materials / grievance redress materials	
Software for data collection / supervision / monitoring / grievance redress	\$40,000.00
Preparation of site-specific ESMPs and other site-specific plans	\$50,000.00
Implementation of site-specific ESMPs and other site-specific plans	\$40,000.00
Environmental and social staff (for different levels)	\$50,000.00
Travel and accommodation budget for environmental and social staff site visits	\$40,000.00
External monitoring or supervision consultant (3 person-months consultant) for 1 year	\$60,000.00
TOTAL	\$430,000.00

7 Stakeholder Engagement, Disclosure, and Consultations

Stakeholder engagement is an ongoing, organized, and iterative process. The Project recognizes the importance of an inclusive stakeholder engagement process that is implemented throughout the project cycle. An effective stakeholder engagement significantly contributes to a successful project design and implementation, ensures environmental and social sustainability of subprojects and enhances project acceptance. A Stakeholder Engagement Plan (SEP) has been prepared for the Project, based on the World Bank's Environmental and Social Standard 10 on Stakeholder Engagement. The SEP maps the key stakeholders of the project, defines how information will be disseminated and how all stakeholders will be consulted. The SEP will be followed throughout project implementation, and specifically for the preparation of subprojects.

The Project shall ensure that meaningful consultations are conducted as a two-way communication process, such that it:

- Begins early in the project planning process to gather initial views on the project proposal and inform project design.
- Encourages stakeholder feedback, particularly as a way of informing project design and engaging stakeholders in the identification and mitigation of environmental and social risks and impacts;
- Is conducted on an ongoing basis; as risks and impacts arise;
- Is based on the prior disclosure and dissemination of relevant, transparent, objective, meaningful, and easily accessible information in a time frame that enables meaningful consultations with stakeholders in a culturally appropriate format, in relevant local language(s), settings, and understandable to stakeholders.
- Considers and responds to feedback;
- Supports active and inclusive engagement with project-affected parties;
- Is free of external manipulation, interference, coercion, discrimination, and intimidation; and
- Is documented and disclosed by the Project.

7.1 Consultation during ESMF Preparation

A series of stakeholder consultations were conducted within the period July 1 to December 1, 2023. The main objective of the consultations was to present a general overview of the proposed project, seek feedback from stakeholders, and gather additional information to inform the design of the ISRS Project particularly the technical aspects, procurement, financial management, environmental and social safeguards, gender, and implementation arrangements. Consultations among Central Offices (CO) of DPWH, DepEd and DOST- PHIVOLCS, and University of the Philippines- National Engineering Center (NEC) were participated by total of 32 stakeholders (16 from DepEd CO, 3 from DPWH CO, 8 from DOST-PHIVOLCS, and 5 from NEC).

Stakeholder consultations were also conducted in three regions heavily hit by disasters-Region I (Ilocos Region), Region V (Bicol Region), and Region VII (Central Visayas Region). Participants included officials and staff from regional offices including representatives from the concerned School Division Offices, DepEd regional office, DPWH regional office, and NEDA regional office, as well as provincial offices of Ilocos Norte, Albay, and Bohol. School-level stakeholder consultations were conducted in the select provinces. A total of 10 schools were covered (4 in schools in Bohol, 4 schools in Albay, and 2 schools in Ilocos Norte) by the school-level consultation participated in by the school administrators, parents,

teachers, students and barangay officials. A total of 227 stakeholders participated, of which 56 percent are female.

Table 25: School-level Stakeholder Consultations

Region and Division	Date	Office/Schools Visited
I, Ilocos Norte	Nov. 28-30, 2023	DepEd Region I Regional Office, San Fernando, La Union Badio Elem School, Pinili, Ilocos Norte Filipinas East Elem School, San Nicolas, Ilocos Norte
V, Albay	Nov. 20-21, 2023	DepEd Region V Regional Office, Legazpi, Albay Naga National High School, Tiwi, Albay Tambilagao Elem School, Bacacay, Albay Sta. Misericordia Elem School, Sto. Domingo, Albay Impact Learning Center Elem School, Daraga, Albay
VII, Bohol	July 17-18, 2023	Schools Division Office (SDO) of Bohol Clarin National School of Fisheries Lomboy Elementary School Lapu-lapu Elementary School Guadalupe Elementary School

The concerns and issues raised and recommendations provided by the various stakeholders during the consultations were taken into consideration and incorporated in the ESMF. Among these are on the following:

- Inputs to the overall project design
- Type of calamities/ disasters that affected the schools
- Implementation Arrangements
- Stakeholder consultations and participation in school building design and construction
- Grievance Redress Mechanism
- Gender based violence (GBV) and SEA/SH
- Universal access and gender inclusive school infrastructure
- Land ownership of school site
- Community health and safety related to construction activities
- Occupational Health and safety
- Current peace and order conditions
- Environmental permits (i.e. ECC/CNC)
- Water source and electricity
- Waste Management
- Needs aside from infrastructure to increase the resiliency of schools against calamities/natural disasters

A summary of the key stakeholder inputs is presented in Annex 4.

The identified major stakeholder knowledge gaps of the project based on the school-level consultations among the 10 schools covered were mainly around the following: the selection process and criteria of beneficiary schools, coverage of the scope of work of the various levels of intervention - repair and rehabilitation (simple works) and retrofitting and reconstruction (complex works), inclusion of universal access and gender inclusive design considerations in the school infrastructure and the lack of experience and knowledge on handling grievances especially GBV and SEA/SH related-cases. The SEP shall detail how these gaps will be addressed through information disclosure, conduct of meaningful consultation and establishing an inclusive Grievance Redress Mechanism. Relevant stakeholder groups that should be included in future engagement are vulnerable groups such as persons with disabilities (PWD), Indigenous Peoples communities in the selected school sites and representatives of BARMM. Stakeholder engagement strategies for these groups shall be detailed in the SEP.

7.2 Stakeholder consultations during implementation

Other stakeholder consultations will be conducted during implementation following the SEP that has been prepared for the project. To ensure participation and feedback of stakeholders, school community stakeholders and project affected persons including school administrators, teachers, parents, students, LGU representatives, through the school-based project committee, will be continuously consulted and will participate throughout the project implementation period. Through the School-based Project Committee, the stakeholders will also be kept informed of all developments or any changes in the project throughout the project life through various forms of communications.

7.3 Disclosure of the ESMF

Public consultations shall be conducted to gather feedback and comments on the ESMF. The ESMF and ESCP will be disclosed at the DepEd and DPWH websites as the documents are finalized together with other E&S documents and instruments such as the Stakeholder Engagement Plan (SEP) and Labor Management Procedures (LMP).

8 Grievance Redress Mechanism

The establishment of a Grievance Redress Mechanism (GRM) facilitates the Project to respond effectively and efficiently to project-related queries, feedback and complaints from various project stakeholders. This GRM makes the following distinctions:

- a. Project-related queries, feedback and complaints: it focuses on Project-related complaints and grievances and defines the different steps of handling such.
- b. SEA/SH related complaints and grievances: given the sensitivities of SEA/SH cases and considerations related to a survivor-based approach, these types of complaints are reported to the available GRM grievance recipients, but the grievances follow a different process. This counts for complaints and grievances from project stakeholders including workers deployed by the project.
- c. Second tier/escalated complaints and grievances: This concerns complaints and grievances that cannot be solved by the first tiers or have been escalated by users dissatisfied with the resolutions from the first tiers. This GRM will include procedures how these grievances shall be addressed through an appeals mechanism.

8.1 Objectives and Core Principles

The Grievance Redress Mechanism (GRM) is an integral project management element that intends to seek feedback from various project stakeholders and resolve complaints on project activities and performance. The mechanism will ensure that (i) the public within the project sites are aware of their rights to access, and shall have access to the mechanism free of administrative and legal charges; (ii) that these rights and interests especially of students, children and other vulnerable groups are protected; and (iii) concerns arising from project performance in all phases are addressed effectively and efficiently.

The project's grievance redress mechanism will address stakeholders' concerns and complaints promptly, using a transparent process that is responsive, culturally appropriate, and readily accessible to all project stakeholders at no cost and without retribution. The redress mechanism will be communicated to the nearby communities and stakeholders of the project and subprojects. A separate grievance redress mechanism for the workers is established to address their complaints and is described in the LMP.

The Project shall uphold the following core principles in establishing and implementing a functional and effective Grievance Redress Mechanism (GRM):

1) Fairness and Objectivity. Grievances received shall be treated confidentially, assessed impartially, and handled transparently. The GRM shall operate independently of all interested parties to guarantee fair, objective and impartial treatment of each case.

2) Simplicity and accessibility. The Project shall ensure that the procedure to file grievances and seek action are simple enough that project stakeholders can easily understand and follow the procedures. The GRM shall be made known to the public and accessible to all stakeholders, irrespective of the remoteness of the area they live, language they speak and education or income they have. Special attention is given to ensure that disadvantaged or vulnerable groups and Indigenous Peoples communities including those with special needs, are able to access the GRM.

3) Responsiveness and efficiency. The GRM shall be designed to be responsive to the needs of all complainants. The Project shall ensure that officials and personnel handling grievances are trained to take effective action upon,

and respond quickly to grievances and suggestions. All grievances, simple or complex, are addressed and resolved as quickly as possible. Actions to be taken on grievance or suggestion shall be swift, decisive and constructive.

4) Participatory and Inclusive. The GRM of the Project shall ensure that a wide range of project stakeholders are encouraged to bring their grievances and comments to the attention of the Project Management. The Project shall create an environment where project stakeholders feel secure to participate without fear of intimidation or retribution. The GRM shall be designed to take into account culturally appropriate ways of handling community concerns in a form and language(s) understandable to the person concerned. The GRM shall offer a variety of approaches to ensure social and cultural appropriateness especially in handling sensitive cases such as gender-based violence (GBV) and Sexual exploitation and abuse and sexual harassment risks (SEA-SH) incidents and SOGIE-related complaints.

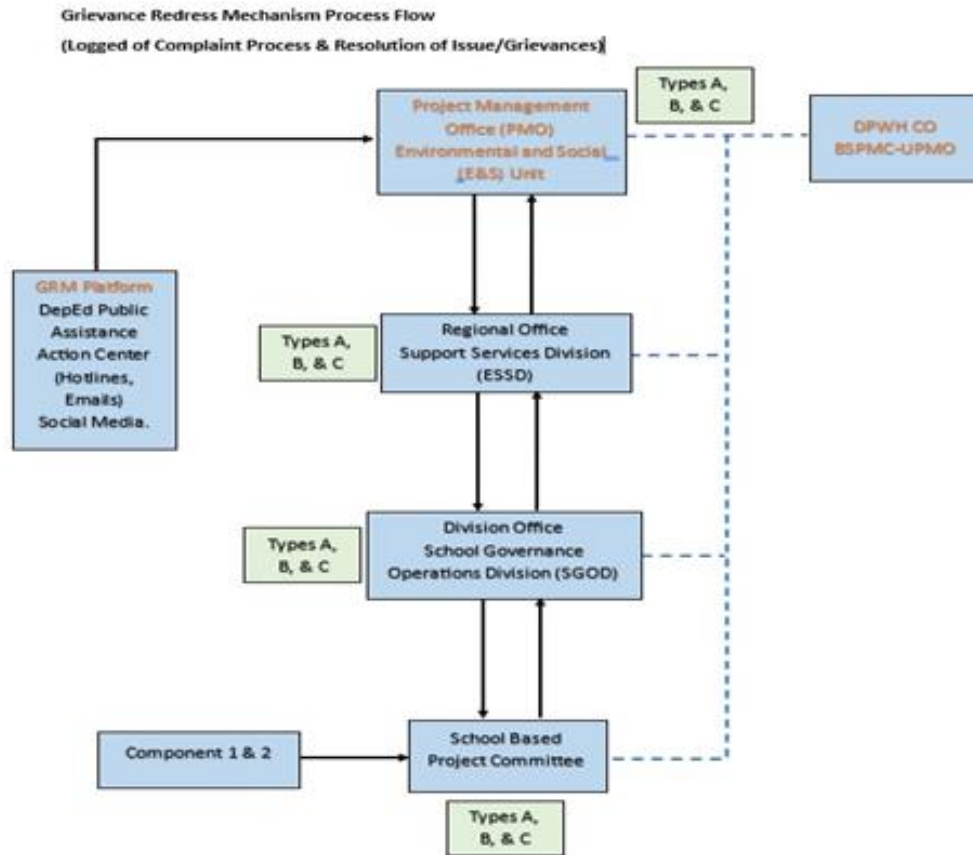
5) Proportionality. The scope, form, and level of complexity of a project grievance mechanism should be proportionate to the potential adverse impacts on and interaction with the local communities. The Project shall ensure that the proportionality of the GRM matches the scale of the identified risk and adverse impact on affected communities. The grievance mechanism design features as well as the nature and amount of resources needed for implementation shall be determined through an analysis of the results of the social and environmental assessment to understand who will be affected and what the impacts on them are likely to be.

8.2 Grievance Structure

The DepEd, as the lead implementing agency will be responsible for the project's Grievance Redress Mechanism (GRM). Regarding the establishment of grievance committees, there will be no separate committees created at the school, division, or regional levels. Instead, existing offices will be utilized for this purpose. At the school level, the school-Based Project Committee will handle grievances. In the Division Office, the School Governance Operation Division (SGOD) of the Division Office will manage grievances. In the Regional Level, the Education Support Service Division (ESSD) of the Regional Office will be responsible for addressing grievances. At the Central Office, the DepEd PMO under EFD, specifically the E&S Unit will manage the monitoring of grievances recorded in the GRM Platform included its resolution.

The initial channel for resolution begins at the school level through the School-Based Project Committee. However, following this, all such issues are to be forwarded to the SGOD of the Division Office for proper recording. If the issue pertains to the Department of Public Works and Highways (DPWH), the school is authorized to refer it directly to them. In cases where the school lacks the capacity to address the issue, escalation will occur: to the division office through the SGOD, to the regional office through the ESSD, or to the central office through PMO. Both agencies shall ensure that prompt and immediate resolution of grievances is made to ensure satisfactory project performance. The Project GRM shall be managed by the Social and Environmental PMO teams. Project stakeholders may file complaints or direct their queries and feedback at any level of the GRM structure (Figure 11).

Figure 11: GRM Implementation Structure



8.3 Grievance Uptake

The Project GRM will set-up various modes of uptake channels to ensure accessibility of the mechanism to all stakeholders. All Query/Feedback/Complaints may be directed at any level – School, DepEd Division Office, DepEd Regional Office and DepEd and DPWH Central Office. The different ways in which stakeholders can submit their grievances are through the following: call (via existing DepEd Public Assistance Action Center hotline numbers), text messaging (via mobile numbers to be disseminated), e-mail, website for ISRS where they can lodge grievances, letter, grievance or suggestion boxes, and in-person. Complainants have the right to stay anonymous, especially involving sensitive issues.

8.4 Grievance Log

All the queries, feedback and grievances received through the different channels mentioned will be integrated into a single database managed by DepEd PMO Social and Environmental Unit, which will serve to generate the necessary reports, including the information on the grievances received by the contractors and their reply to them. This information will be considered in the semi-annual reports.

The Grievance Committee will undertake the following steps in a timely manner:

Acknowledgment and follow-up

- acknowledge and provide feedback promptly to the aggrieved party, within two (2) working days from the date the grievance was received
- Feedback can be provided through phone call or in writing. Feedback can also be communicated through a stakeholders' meeting and/or beneficiary meetings during Project activities

Assessment and Verification

- Check if complaint is project-related. If the complaint is project-related, acknowledge receipt and start investigation process. If as per assessment and verification the complaint is not project-related, acknowledge receipt and endorse to proper agencies or concerned party
- Escalate outright grievances that require higher level interventions or endorse at a lower level
- Grievances can be assessed according to the following types:
 - Type A – inquiries, feedback and complaints that directly affect the community and school such as noise, disruption of classes as well as GBV, SOGIE, SEA/SH related-cases (Type A complaints can be handled at the school level)
 - Type B – Major violations and/or non-compliance of E&S Standards as stipulated in the site-specific ESMP especially those that impact on the safety and security of learners and the community (Type B complaints should be endorsed at the SDO or RO)
 - Type C – Allegations about corruption, misuse of funds, falsification of public documents (Type C complaints should be endorsed at the CO)
- Endorsement of grievances to another level should always be supported with a report of actions taken and should only endorse at a higher level if the grievance committee has exerted all means possible to resolve the complaint at their level
- Refer outright grievances that are outside the local office jurisdiction

Investigation and action

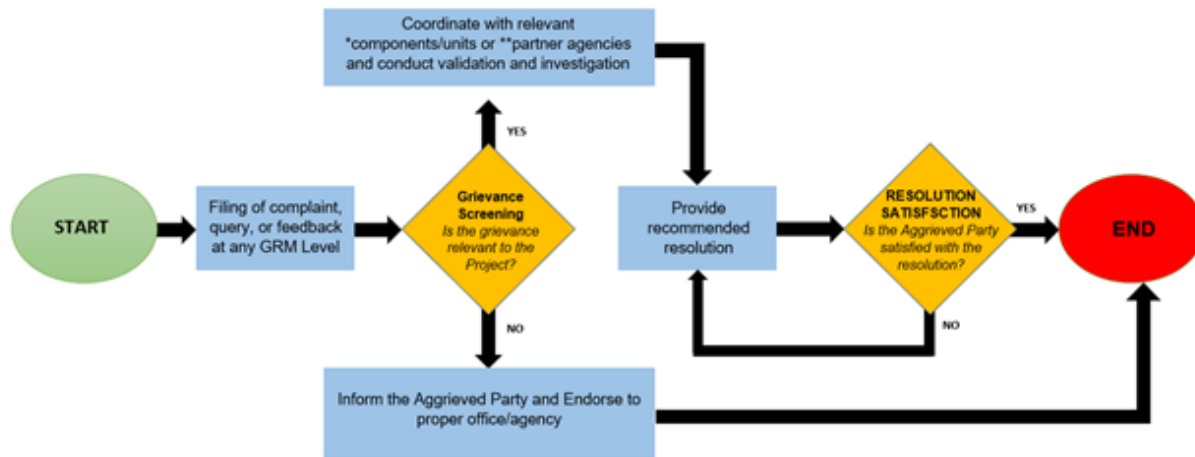
- If query, feedback or complaint is assessed as project-related, within ten (10) working days from the date the complaint was received, the Grievance committee shall organize meetings and/or site inspection visits together with the relevant parties/agencies/contractors to discuss/investigate the case and come up with an action plan or resolution.
- Based on the meetings/site inspection visits, the Committee shall come up with recommendations to resolve the case and offer this to the aggrieved party and seek his/her consent to implement such mitigation measures. All meetings should be recorded and copies of the minutes of meetings will be provided to the complainant.

Case Resolution

- If aggrieved party agrees with mitigation measure/resolution, the concerned office/level shall implement the agreed resolution. A Resolution Form shall be signed by the complainant or a letter signifying that he/she is satisfied with the resolution shall be secured to consider the case resolved.
- Confirmation that the case has been resolved from anonymous complainant(s) and those who wouldn't be able to personally sign the resolution form due to security reasons will be communicated through their provided contact information and will be asked to confirm agreement on the resolution via text message or email.

Below is the Grievance Resolution Process.

Figure 12: Grievance Resolution Process



8.5 Publicly Advertised Procedures

The procedure to file a grievance will be disseminated internally and externally. Internally, this procedure will be made known to all levels of DepEd and DPWH that will be involved in the Project and to contractors, so as to disseminate the details of the GRM to all project stakeholders. The Project GRM will set up designated contact points at all levels (school, division, region and central office) where all stakeholders including children, students, and vulnerable groups can freely express their concerns and complaints. The project shall build on DepEd’s existing mechanisms as per DepEd Order No. 35 s. 2004 (Revision of the Grievance Machinery of the Department of Education) where mechanisms are put in place to allow grievances to be resolved at the school level. DepEd’s Child Protection Policy shall also be implemented complementing the GRM. The Project shall implement awareness programs and educational campaigns targeted specifically at children and students to inform them about the grievance mechanism.

Externally, the information on the GRM shall be well disseminated as well with the communities surrounding the school. Flyers with infographics about the GRM procedures will be distributed to various project stakeholders. The infographics will include information on the various channels to file grievances, the GRM structure and the indicative period in which the aggrieved person will receive a response or can expect a resolution. Community leaders shall play an important role in encouraging timely report of grievances that should be perceived as a means to help improve project implementation. The Procedure shall include the following: Reception and registration of the case, Admission of the case, processing, monitoring and resolution of the case and filing and documentation.

8.6 Appeals Process

If a complainant is not satisfied with the proposed grievance solution, he or she has the opportunity to appeal the solution. For this purpose, the aggrieved person will be able to file an appeal directly with the DepEd PMO Project Director. The Project Director can either handle the case directly, or can set up a committee, with members that he or she deems appropriate for the respective case. The committee will then take a decision on how to handle the grievance and propose a solution. If the aggrieved person is still dissatisfied with the proposed solution, he or she can turn to the formal judiciary or can turn to community-based grievance solution mechanisms available to them.

8.7 Gender-Based Violence (GBV), Sexual Exploitation and Abuse-Sexual Harassment (SEA-SH), and Sexual Orientation, Gender Identity, and Expression (SOGIE) Related Grievances

To address project-related complaints, particularly those involving Gender-Based Violence (GBV), Sexual Exploitation and Abuse-Sexual Harassment (SEA-SH), and Sexual Orientation, Gender Identity, and Expression (SOGIE), these types of complaints are reported to the GRM committee/focal person but the grievances follow a different resolution process that is further detailed in the SEP. The following strategies shall be applied to ensure a survivor-centered approach prioritizing survivors' safety, well-being, and dignity in all procedures:

Specialized Committees: Establish specialized grievance committees at all levels (school, division, region, central office) to handle GBV, SEA-SH, and SOGIE-related cases building on existing DepEd structures as per DepEd Order 32 s of 2017 Gender Responsive Education Policy (which includes a provision to establish VAWC desk in schools); DepEd Order 40 s 2012 Child Protection Policy and DepEd Order 35 s 2004 Revision of the Grievance Machinery at the DepEd.

Training and Sensitization: Provide specific training to grievance committees/focal persons handling GBV, SOGIE, SEA/SH related cases to ensure sensitivity, empathy, and trauma-informed techniques in resolving such cases.

Privacy and Confidentiality: All grievance recipients and anyone handling the GBV, SOGIE, and SEA/SH-related grievances must maintain absolute confidentiality in regard to the case and in a survivor-centered manner. Maintaining confidentiality means not disclosing any information at any time to any party without the informed consent of the person concerned. There are exceptions under distinct circumstances, for example a) if the survivor is an adult who threatens his or her own life or who is directly threatening the safety of others, in which case referrals to lifesaving services should be sought; b) if the survivor is a child and there are concerns for the child's health and safety. The survivors need to be informed about these exceptions.

Informed Consent: The survivor can only give approval to the processing of a case when he or she has been fully informed about all relevant facts. The survivor must fully understand the consequences of actions when providing informed consent for a case to be taken up. Asking for consent means asking the permission of the survivor to share information about him/her with others (for instance, with referral services and/or PIU), and/or to undertake any action (for instance investigation of the case). Under no circumstances should the survivor be pressured to consent to any conversation, assessment, investigation or other intervention with which she does not feel comfortable. A survivor can also at any time decide to stop consent. If a survivor does not consent to sharing information, then only non-identifying information can be released or reported on. In the case of children, informed consent is normally requested from a parent or legal guardian and the children.

Awareness Raising: General awareness raising among staff with regards to GBV, SOGIE and SEA/SH will be conducted, and all staff are expected to sign Codes of Conducts (CoCs) with reference to SEA/SH.

9 Annexes

Annex 1: E&S Screening Checklist, and Forms for Subprojects

Part 1. Basic Sub-Project Information

Name of School :		
Location	Region – Province (District)	City/Municipality
	Street/Sitio/Barangay Geographical coordinates: Longitude Latitude	Zone/Classification (i.e. residential, commercial, industrial, mixed use):
Type of School (Check Appropriate Box and fill-out blanks) :	<input type="checkbox"/> Primary	Student Population (Total): No. of Learners Occupying the School Building to be intervened: No of School Personnel:
	<input type="checkbox"/> Junior High School	Other Description: No. per Student Age Group:
	<input type="checkbox"/> Senior High School	6 to 12 year of age = _____
	<input type="checkbox"/> Integrated	13 to 16 year of age = _____
	<input type="checkbox"/> Others. _____	17 to 20 year of age = _____
Contact Person	Name :	Designation:
	Landline No.:	Email Address:
	Mobile No.:	
Building Condition	No. of Floors:	Gross Floor Area (Building): Total Lot Area:
	Estimated No. of Occupants at any given time :	Year Constructed:
Cause of building/s damage	<input type="checkbox"/> Flooding	<input type="checkbox"/> Others:
	<input type="checkbox"/> Earthquake	
	<input type="checkbox"/> Strong winds/typhoon	Description:
	<input type="checkbox"/> Building Age	
Planned Intervention	<input type="checkbox"/> Repair	<input type="checkbox"/> Reconstruction
	<input type="checkbox"/> Rehabilitation	<input type="checkbox"/> Site Improvement
	<input type="checkbox"/> Retrofitting	<input type="checkbox"/> Others/Description:

Part 2. Description of the Sub-project site

Guide Questions/Instructions	Yes/ No	Describe if Yes
Is the site frequently visited by typhoons and extreme weather events?		
Is the site prone to tsunami and storm surge?		
Is the site affected by flooding? If yes, describe extent of flooding experienced		
Is there adequate drainage system at the site and the surrounding areas		

Guide Questions/Instructions	Yes/ No	Describe if Yes
Is the site prone to earthquake? Describe frequency, corresponding magnitude and damages incurred to school and surrounding areas infrastructure		
Are there trees to be removed/affected by the construction		
Is the site located within 10 meters from a waterbody or waterway/canal?		
Are there available solid waste management services in the locality		
Are there Available hazardous waste transport and treatment services in the locality?		

Part 3. Sub-projects Environmental and Social Impacts Screening Checklist – Management Planning

Environmental and Social Impacts Identification Questionnaire	Yes/ No	Management/Compliance Plan
ESS1: Assessment and Management of Environmental and Social Risks and Impacts		
Does the existing facility for <u>repair, rehabilitation, and retrofitting</u> have valid ECC?		If yes, it does not have to go through the assessment process requirement by the Philippine government but If no, then it has to undergo screening based on the project size to determine if the subproject is required to secure ECC and the level of requirement (see figure in section 3.2 of this ESMF) Conditions of the ECC and related management plan commitments should be implemented
Does the existing facility for <u>reconstruction</u> have valid ECC?		Regardless of whether it has valid ECC or not, it has to undergo screening based on the project size to determine if the subproject is required to amend existing ECC or to secure new ECC and the level of requirement (see figure in section 3.2 of this ESMF) Conditions of the ECC and related management plan commitments should be implemented
Are the potential risks and impacts identified in Chapter 5 applicable to the subproject?		For all applicable risks and impacts especially those that are classified as moderate to substantial, appropriate site-specific mitigation and M&E systems should be put in place as part of the ESMP
Is the subproject located in an area that is susceptible to natural hazards such as flooding, earthquake, extreme weather events etc. as identified by relevant government agencies?		If YES, subproject needs to request for a hazards assessment from Phivolcs, MGB or refer to Hazard Hunter PH and download hazard maps for the site. Appropriate structural measures shall be incorporated in the DED and non-structural mitigation measures in the ESMP
ESS2: Occupational Health Hazards		

Environmental and Social Impacts Identification Questionnaire	Yes/ No	Management/Compliance Plan
Will the works require large number (e.g., more than 100) of staff and laborers from outside the local area?		Refer to LMP
Will the infrastructure works require a worker's camp? If "Yes", how many workers are expected to occupy the camp?		Refer to LMP and Generic ESMP
Are the works activities prone to hazards, risks and could result in accidents and injuries to workers during construction or operation?		<p>If YES, subproject shall prepare a CoC during implementation and operation in accordance with the LMP to include the following:</p> <ol style="list-style-type: none"> 1. Establishment of GRM including procedures for Gender-Based Violence Sexual Exploitation, Abuse and Harassment (GBV SE/AH) 2. Occupational Safety and Health Plan
ESS3: Resource Efficiency and Pollution Management		
Will the subproject involve the extraction or use of surface or groundwater?		If YES, subproject needs to secure the <u>Water Permit</u> from NWRB and submit together with the potable water testing.
Will the subproject require a large amount of energy, water or other resources during project construction or operation?		If YES, provide water-use / resource-use efficiency measures in the ESMP and in the building design, i.e. cleaner production technologies, energy efficiency, etc.; also explore renewable energy potential (i.e. solar, wind) and feasibility for the project
Will the subproject result in the production of a large volume of surplus excavated materials?		If YES, a waste management system should be developed prior to contractor's mobilization, taking into consideration current waste management services available in the locality, in coordination with the LGU and landowner of disposal/staging area for surplus excavated materials.
Will the subproject result in the significant emission of air pollutants, gaseous and odor emissions?		If YES, the subproject needs to provide mitigation measures to comply with the ambient air quality standards prescribed by the DENR.
Will the subproject result to the generation of hazardous wastes including asbestos and e-waste?		If YES, the subproject needs to comply with the provisions of R.A. 6969 as part of ESMP including the requirements for e-wastes and asbestos handling and treatment/disposal

Environmental and Social Impacts Identification Questionnaire	Yes/ No	Management/Compliance Plan
Will the subproject result in the generation of compostable waste?		If yes, the subproject must provide a composting site that is distanced properly from the facility. Alternatively, the waste must be transferred to a disposal facility or sanitary landfill through appropriate waste management services available in the locality.
ESS4: Community Health and Safety		
Is the project located next to a residential community?		If YES, provide mitigation measures for community safety in the ESMP.
Are there be hospitals and health clinics located next to the construction site that may be affected by dust, noise, traffic, and construction-related nuisance?		If YES, provide mitigation measures for health and safety in the ESMP.
Are there be religious places (churches, mosques, etc.) located next to the construction site that may be affected by dust, noise, traffic, and construction-related nuisance?		If YES, provide mitigation measures to prevent disruption of activities in the ESMP.
Is the road going to the site too narrow to accommodate construction vehicles?		If Yes, appropriate alternative transport mechanisms should be included in the ESMP.
Will the subproject result to potential diseases transmission from inadequate waste disposal?		If YES, apply OHS measures and community health and safety measures in the ESMP
Will the subproject cause risks related to occupational health and safety due to physical, chemical, and biological hazards during project construction and operation?		If YES, apply occupational health and safety measures during construction and operation of the facility in the ESMP.
Will the subproject cause community health and safety risks due to the transport, storage and use and/or disposal of materials likely to create physical, chemical and biological hazards during construction, operation, and decommissioning?		If YES, provide mitigation measures for community health and safety in the ESMP.
Will the subproject expose and cause community health and safety risks due to the presence of migrant workers?		If YES, include mitigation measures in the ESMP.

Environmental and Social Impacts Identification Questionnaire	Yes/ No	Management/Compliance Plan
Could the subproject lead to discrimination of Indigenous Peoples or other societal groups?		If YES, include mitigation measures in the ESMP by invoking applicable provisions from the LMP
Are there existing conflicts in the immediate community? Will this project or activities related to such exacerbate this?		If YES, include mitigation measures in the ESMP and implement the GRM
Could the beneficiary selection be contested?		If YES, include mitigation measures in the ESMP and implement the GRM
ESS5: Land Acquisition, Restrictions on Land Use and Involuntary Resettlement		
Will the project necessitate area outside the school compound for storage of construction materials and for parking of construction vehicles?		If yes, the contractor should identify appropriate area that will not have or have minimal adverse impact as part of the ESMP
Will the subproject adversely affect lands, crops, structures, other properties and/or livelihood?		If YES, conduct a survey of Project Affected Persons (PAP), electric posts, streetlights, lifeline facilities, and those that will lose access to their properties (landlocked properties) and document evidence of consultation to be included in the subproject proposal package.
Will the subproject displace people's homes and/or people's livelihood or restrict access to traditional economic resources?		If YES, prepare a RAP with LRP
Will the subproject involve, require or result in acquisition of land, right-of-way and/or easements rights?		If YES, prepare Land Acquisition Documents, clearing showing transfer of ownership or rights from landowners to concerned LGU. Acceptable documents include: TCT, Deed of Sale, Deed of Donation (individual or group); and Quit Claim and Waiver of Rights (individual or group).
Is the land to be used still classified under public land?		If YES, secure tenurial instrument from DENR (i.e. Special Land Use Permit, Gratuitous Special Use Permit, Forest Land Use Agreement for forest lands, and Foreshore/Miscellaneous Lease Agreement for Foreshore areas)
Is the subproject located in a reclaimed area?		If YES, subproject needs to present a permit from the Philippine Reclamation Authority.
Will the works interfere with or block access, routes etc. (for people, livestock) or traffic routing and flows?		Refer to Chapter 5 of this ESMF

Environmental and Social Impacts Identification Questionnaire	Yes/ No	Management/Compliance Plan
ESS6: Natural Habitats, Environmentally Sensitive areas or threatened species		
Will the subproject activities including transport of construction materials have potential effect on ecosystem services and biodiversity?		If yes, appropriate provisions must be included in the ESMP such as protection of mangroves and vegetation serving as flood buffer and other protection measures as appropriate based on the sub-project site
Will the subproject involve Tree Cutting?		Appropriate Tree Cutting Permit should be secured and the corresponding conditions implemented/complied
Will the access route to the subproject site pass through protected areas and primary forests designated by the government (national park, forest reserve world heritage site, or forest lands for strict protection and conservation, etc.)?		If YES, prepare an ESMP that includes measures to ensure that transport and other project related activities comply with relevant management plan for these areas
ESS7: Indigenous Peoples		
Are there nearby Ancestral Domain?		If Yes, the sub-project shall comply with relevant processes and standards outlines in this ESMF
Will the sub-project be located in an ancestral domain?		
Are there students or school personnel who belong to indigenous communities?		
ESS8: Historical, archaeological or cultural heritage site		
Could the excavation and construction works potentially damage any historical, archaeological, artifacts?		If yes, refer to Chance Finds Procedure
Will the construction or civil works adjacent to a cultural heritage building (Gabaldon)		
ESS10: Stakeholder Engagement and Grievance Redress		
Are inputs from community members and those who may be affected by the works or any other project activities important for the project?		Conduct stakeholder identification and analysis in accordance with SEP template
Are there existing stakeholder engagement platforms within the school or community?		
Gender based violence		

Environmental and Social Impacts Identification Questionnaire	Yes/ No	Management/Compliance Plan
Is there a school-based GBV Focal person?		Ensure a GBV Focal person is assigned in each school who is trained to handle gender-based violence related cases. If necessary, provide additional training.

Based on the above screening, the applicable safeguard instrument to be developed for the subproject are (Check applicable instruments):

- Environmental and Social Code of Practice (ESCOP) – applicable to activities generating low (minimal) impacts
- Environmental and Social Management Plan (ESMP) – applicable to activities generating medium (manageable) to high (major) impacts
- Waste Management Plan
- Construction Safety and Health Plan
- Grievance Redress Mechanism
- Stakeholder Engagement Plan

Note that the applicable safeguards measures are to be included in the bid and contract documents of the contractor.

Prepared/Submitted by:	Approved by: Noted by:	
Signature over Printed Name	Signature over Printed Name	Signature over Printed Name

Annex 2: ESMP Template

Environmental and social risks and impacts are strongly linked to subproject location and scope of activities. This ESMP should be customized for each specific subproject location and activities.

1. Subproject Information

Subproject Title:	
Estimated Cost:	
Start/Completion Date:	

2. Site/Location Description

This section concisely describes the proposed location and its geographic, ecological, social and temporal context including any offsite investments that may be required (e.g., access roads, water supply, etc.). Please attach a map of the location to the ESMP.

3. Subproject Description and Activities

This section lists all the activities that will take place under the subproject, including any associated activities (such as building of access roads or transmission lines, or communication campaigns that accompany service provision).

4. ESMP Matrix: Risk and Impacts, Mitigation, Monitoring

This section should identify anticipated site-specific adverse environmental and social risks and impacts; describe mitigation measures to address these risks and impact; and list the monitoring measures necessary to ensure effective implementation of the mitigation measures. It may draw from the ESMF's pre-identification of potential risks/impacts and mitigation measures, as applicable, and drill down further to ensure relevance and comprehensiveness at the site-specific level. For subprojects involving construction, two sets of tables may be needed, for the construction phase and the operation phase. *(the matrix below is a sample of the common risk and impacts expected from the subprojects and the corresponding applicable monitoring parameters; it should be customized, depending on specific sub-project site conditions/situations)*

Potential Risks and Impacts	Mitigating Measures	Monitoring Parameters	Costs of Mitigation/Monitoring	Institutional Arrangement
Detailed Architectural and Engineering Design				
Land acquisition of subproject site	<p>Conduct E&S screening of each subproject</p> <p>Included in the exclusion list. Subproject sites are within existing school premises that does not require land acquisition.</p>	<p>Completed E&S Screening Form</p> <p>Land title or other tenorial instruments</p>	Monitoring costs: Included in staff time	DepEd and DPWH PMOs
Adverse impact on ancestral domains such as land, natural resources, culture and indigenous peoples displacement	<p>Conduct E&S screening of each subproject</p> <p>Included in the exclusion list</p> <p>Conduct meaningful consultation</p>	<p>Completed E&S Screening Form</p> <p>Consultation documentation</p>	Monitoring costs: Included in staff time	DepEd and DPWH PMOs

Potential Risks and Impacts	Mitigating Measures	Monitoring Parameters	Costs of Mitigation/Monitoring	Institutional Arrangement
Indigenous Peoples (IP) communities and IP-Ed schools- risks related to cultural and tangible and intangible heritage (e.g., school-building designs and sacred sites within schools)	Conduct meaningful consultation processes following with DepEd Order 34 s 2017 Guidelines on the Formation of Consultative and Advisory Bodies(CAB) on Indigenous Peoples Education (IPEd) in Regions Implementing the IPEd Program and in accordance with the project’s SEP.	Consultation documentation	Monitoring costs: Included in staff time	DepEd and DPWH PMOs with NCIP
<p>Social exclusion risks may include:</p> <ul style="list-style-type: none"> · Lack of proper information disclosure and conduct of meaning consultations especially in GIDA · Exclusion of disadvantaged and vulnerable population (i.e. students, PWDs and IPs) · School Infrastructures rendered inaccessible to vulnerable groups due to design barriers thereby not fully benefiting from the project. · Gender disparities in partaking of project benefits (i.e. non-inclusion of separate toilets for girls and boys in the architectural and engineering plans) 	<p>Conduct inclusive and accessible consultations with project stakeholders ensuring participation of disadvantaged and vulnerable population as per SEP.</p> <p>Include Universal access and design principles in the design of school infrastructures responsive to vulnerable population in accordance with follow BP 344 Accessibility Law, IPRA law and DepEd Order no. 62 series of 2011 to ensure culturally appropriate design and DepEd Order no.10 s 2016 Policy and Guidelines for the comprehensive Water, Sanitation and Hygiene in Schools (WINS) Program</p> <p>Provide transparent information on project activities, benefits, and eligibility criteria to communities, through accessible channels, trusted intermediaries, and in relevant local languages.</p> <p>Proactively identify, consult with, and reach out to disadvantaged and vulnerable groups and households (through surveys, consultations, or other means, as appropriate)</p> <p>Ensure that the project Grievance Redress Mechanism (GRM) is accessible by disadvantaged and</p>	<p># of community consultation sessions participated by vulnerable groups</p> <p>Consultation documentation</p> <p>Detailed Architectural and Engineering designs include universal access and gender inclusive design (i.e. inclusion of ramps and WASH facilities)</p>	Monitoring costs: Included in staff time	DepEd and DPWH PMOs

Potential Risks and Impacts	Mitigating Measures	Monitoring Parameters	Costs of Mitigation/Monitoring	Institutional Arrangement
	vulnerable groups through raising awareness among these groups and in relevant local languages, providing different intake channels			
Implementers' limited understanding of risks and impacts of subprojects	Screen each subproject prior to implementation Prepare all relevant E&S instruments to mitigate risks and impacts Raise awareness of E&S risks	% of subprojects that have been screened # of additional E&S instruments prepared	Monitoring costs: Included in staff time	DepEd and DPWH PMOs
Procurement				
Non-inclusion of E&S requirements in the bidding documents	Ensure submitted bidding documents of contractors include the E&S documentary requirements Upon winning the bid, the contractor shall submit the subproject specific Contractor's ESMP (CESMP) for approval of the POM.	# of approved subproject specific CESMP	Monitoring costs: Included in staff time	DepEd and DPWH PMOs Contractor
Construction Phase				
Lack of capacity of implementers to handle E&S risk management	Implement Capacity Building Plan Ensure capacity of other implementers and contractors through initial assessment of capacity and training	% of training in Capacity Building Plan implemented % of implementers and contractors that have received relevant training	Costs: See Capacity Building Plan	DepEd and DPWH PMOMs
Temporary disruption and relocation of school classes and essential affiliated services (e.g., clinic and library).	<ul style="list-style-type: none"> Implementing agencies to discuss with school administration options to adopt hybrid classes or modular classes or make-up classes Conduct meaningful consultations involving concerned stakeholders (school 	<ul style="list-style-type: none"> Minutes of meetings Site layout Temporary relocation plan Program of works/schedule 	At least 1% of the total project cost	DepEd and DPWH PMOs Contractor School-based Project Committee

Potential Risks and Impacts	Mitigating Measures	Monitoring Parameters	Costs of Mitigation/Monitoring	Institutional Arrangement
Restrictions to common-use areas in schools could also arise from the cordoning of construction sites and safety zones.	<p>administration, students, parents, BLGU, LSB) to plan the temporary relocation site of affected classrooms and/or other school facilities.</p> <ul style="list-style-type: none"> · Communicate the relocation plans well in advance to all stakeholders, including teachers, students, parents, and support staff. · Coordinate the schedule of activities/program of works with the school administration · Provision of temporary learning and other affected school facilities within school premises that is conducive to learning and meet the necessary safety standards, including fire exits, ventilation, lighting, and sanitation facilities and accessible to PWDs. · Establishment of the grievance redress mechanism as stipulated in the SEP · Post project billboard containing project information and a GRM poster containing contact information of GRM focal person 	<ul style="list-style-type: none"> · Updated site-specific ESMP/ECOP and other applicable safeguard instruments · DOLE approved Construction Health and Safety Plan (CHSP) · Project billboard and GRM poster 		
Security as a contextual risk for schools in conflict-affected areas and/or GIDA	<p>Conduct meaningful consultations among stakeholders</p> <p>Proper coordination with relevant authorities</p> <p>LGUs mandated to ensure and maintain peace and order within their respective areas are to formulate and implement their POPS Plans as per DILG Memorandum Circular No. 2022-118 Guidelines on the Development and Formulation of the Peace and Order and Public Safety Plan (POPS-PLAN) 2023-2025 dated September 19, 2022.</p>	<p>Local Government Unit's (LGUs) Peace and Order and Public Safety Plan (POPS) Plan</p>	<p>Cost of mitigation measures to be shouldered by the LGU</p>	<p>DepEd and DPWH PMOs with respective LGU of the subproject site</p>

Potential Risks and Impacts	Mitigating Measures	Monitoring Parameters	Costs of Mitigation/Monitoring	Institutional Arrangement
	<p>POPS Plan should be updated accordingly.</p> <p>Evacuation plan in case of insurgency or conflicts as part of POPS Plan</p>			
Risks associated with hiring security personnel	<p>Conduct and updating of site-specific security risk assessment</p> <p>Adopt and implement local security activity plan</p> <p>Adopt and enforce standards, protocols and codes of conduct for the selection and use of military and security personnel, and screen such personnel to verify that they have not engaged in past unlawful or abusive behavior, including SEA/SH or excessive use of force;</p> <p>Ensure that the Implementing Agencies (DepEd and DPWH) enters into a MoU, with the Department of National Defense (DND) setting out the arrangements for the engagement of the military and security personnel under the Project (as applicable)</p> <p>Ensure that such personnel is adequately instructed and trained, prior to deployment and on a regular basis, on the use of force and appropriate conduct (including in relation to civilian-military engagement, SEA/SH, and other relevant areas), as set out in the Project Operations Manual (POM) and LMP.</p>	<p>Site-specific security assessments completed and updated on a regular basis</p> <p># of local security activity plans adopted</p> <p># of security personnel screened and verified according to procedure</p> <p>Adequate and appropriate security arrangements in MOU entered between DND and PIU</p>	Monitoring costs: Included in staff time	DepEd and DPWH
Presence of workers in the school facility compound may pose risks to peace and	<ul style="list-style-type: none"> Security workers will be assigned to protect the construction sites, project workers and other stakeholders. 	Implementation of security measures	At least 0.5% of total project cost	DepEd and DPWH PMOs Contractor

Potential Risks and Impacts	Mitigating Measures	Monitoring Parameters	Costs of Mitigation/Monitoring	Institutional Arrangement
order and security of the area	<ul style="list-style-type: none"> · Submit names of workers to the school facility and the barangay · All workers will secure IDs or construction work passes from the school facility and from the Barangay. · Restrict entry of unauthorized persons inside the construction site. · Cordoning of project sites to prevent entry of students to the construction site and project workers inside school premises · Orientation on Gender-based Violence (GBV) and Protection from Sexual Exploitation and Abuse (PSEA) guidelines for project workers and other stakeholders 			
Occupational Health and Safety risks among laborers that may include work-related injuries caused by heights and debris falls, spread of communicable disease, workers' camp conditions and heat fatigue during extreme summer heat	<ul style="list-style-type: none"> · Comply with the Labor Code of the Philippines and the Labor Management Procedures developed for the project including setting up a separate GRM for workers. · Contractor to submit and implement a Construction Safety and Health Program (CSHP) in compliance with the DOLE OSH Guidelines as well as Contractor's subproject specific ESMP. · Designate an onsite Safety Officer duly accredited by DOLE · Assign a contact person onsite to receive/respond to complaints from the barangay/community; provide the name/contact number of the responsible person to the concerned Barangay. · Require workers to wear personal protective equipment (PPEs) appropriate to the task. · Post safety signs/reminders in strategic areas within the construction area 	DOLE approved Construction Safety and Health Program (CSHP) to be implemented by the contractor	CSHP cost to be shoulder by Contractor Monitoring: included in staff time	PMOs Contractor

Potential Risks and Impacts	Mitigating Measures	Monitoring Parameters	Costs of Mitigation/Monitoring	Institutional Arrangement
	<ul style="list-style-type: none"> Provide sufficient lighting at night. Provide barricades/safety barriers, particularly at excavations and stockpiles of aggregates. Provide a first aid kit and a trained first aid responder at the construction site to ensure immediate medical attention in case of accidents. 			
Risk of Labor influx that may have potential impacts in the community on health, violence and abuse	<p>Implement the LMP including the Code of Conduct</p> <p>Set up local workforce minimum content for the contractors</p> <p>Full disclosure to communities local workforce content requirement Maximize the use of local suppliers (for food, water, services etc.)</p> <p>Conduct awareness training on sexual harassment and gender-based violence among contractors, project workers and students.</p> <p>Implement a comprehensive GRM to effectively address and manage cases of GBV</p>	<p>% of local workforce hired (unskilled and skilled)</p> <p># of local suppliers used</p>	Monitoring costs: Included in staff time	<p>Implementer: Contractor</p> <p>Monitoring: PMOs</p>
Risk of Child labor Risk of Forced labor	<p>Comply with minimum age set for all types of work (in compliance with national laws and ESS2) and document age of workers upon hiring</p> <p>Verify age of workers with communities where required</p> <p>Conduct a track record search of the contractors at the bidding process (record of health and safety violations, fines, consult public documents related to</p>	<p># of workers violations (child, forced labor) addressed and closed</p> <p># of existence/maintenance of a labor registry of all contracted workers</p>	Monitoring costs: Included in staff time	<p>Implementer: Contractor / PMOs</p> <p>Monitoring: PMOs</p>

Potential Risks and Impacts	Mitigating Measures	Monitoring Parameters	Costs of Mitigation/Monitoring	Institutional Arrangement
	workers' rights violations, GBV/SEA/SH issues etc.) Raise awareness of communities/suppliers to not engage in child labor and forced labor	% of workers with age verification # of awareness campaigns on child and forced labor		
Labor disputes over terms and conditions of employment (i.e. violations of labor and working conditions)	Implement LMP Priority hiring of qualified local residents in compliance with DOLE policies on local hiring Ensure Workers' GRM are provided and accessible o Introduce transparent procedures for hiring and advertise job opportunities widely Contractors will provide local employment opportunities with standard salary wage based on RTWPB approved wage rates. Provide training on Labor Management Procedures to Contractors and workers	# of workers grievances filed, resolved and closed in accordance with publicly advertised procedures # of training sessions provided	Monitoring costs: Included in staff time	PMOs Contractor
Risk of GBV and SEA-SH in construction sites and workplaces especially among students and women	Conduct of advocacy and awareness raising activities on GBV for students and teachers and workers Adhere to the LMP Contractors and Workers sign the Code of Conduct Set-up a project GRM that ensures a survivor-centered approach in addressing GBV and SEA-SH cases. Establish protocols for early detection of GBV and SEA/SH building on the existing systems of DepED as per DepEd Order 32 s of	# of community awareness sessions held # of workers awareness sessions held % of workers that signed CoCs # of grievances filed List of referral entities/institutions	Monitoring costs: Included in staff time	PMOs Contractor

Potential Risks and Impacts	Mitigating Measures	Monitoring Parameters	Costs of Mitigation/Monitoring	Institutional Arrangement
	<p>2017 Gender Responsive Education Policy (which includes a provision to establish VAWC desk in schools); DepEd Order 40 s 2012 Child Protection Policy and DepEd Order 35 s 2004 Revision of the Grievance Machinery at the DepEd.</p> <p>Establish referral systems</p> <p>When needed, conduct Capacity Development for GBV focals on Prevention of Sexual Abuse and Exploitation, early detection and response.</p>			
<p>Risk of community health and safety on possible accidents due to poor safety protocols or measures being undertaken in the construction site</p>	<p>Conduct consultations with neighboring communities and Barangay about the project and the schedule of works.</p> <p>Provide barriers around trenches and open excavations.</p> <p>Install warning signs.</p> <p>Ensure proper restoration and clean-up of areas disturbed during construction</p>	<p>Include mitigation measures in Contractor's Environmental and Social Management Plan (CESMP) and in DED/POW and Contract</p> <p>DOLE approved Construction Safety and Health Program (CSHP) to be implemented by the contractor</p>	<p>CSHP cost to be shoulder by Contractor</p> <p>Monitoring: included in staff time</p>	<p>PMOs Contractor</p>
<p>Community health and safety issues from construction activities causing considerable noise and air pollution affecting the nearby community and school during conduct of classes.</p>	<p>Provide temporary barriers to barricade the construction area and shield sensitive receptors</p> <p>Coordinate the schedule of activities/program of works with the school administration</p> <p>Strictly prohibit heavy noise generating activities beyond 9:00PM, particularly in areas near residential areas and sensitive receptors.</p>	<p>Check secure barriers</p> <p>Check work schedule</p> <p>Check complaints received</p>	<p>At least 2% of the total project cost</p>	<p>PMOs Contractor School-based Project Committee</p>

Potential Risks and Impacts	Mitigating Measures	Monitoring Parameters	Costs of Mitigation/Monitoring	Institutional Arrangement
	Monitor complaints from the building end-user and communities.			
Water pollution from domestic sewage	<p>Provide temporary toilet facilities or portable toilets for workers with available water and handwashing facilities.</p> <p>Keep the portalets clean and sanitary at all times.</p> <p>Locate the portalets at least 30 meters from an existing water supply well, canal, or surface water body. It should not be located in a place where its odor can reach busy areas of the compound.</p> <p>Ensure collection at least weekly or once contents are almost 2/3 full.</p>	Monitor domestic sewage management and sanitation at the site	At least 2% of the total project cost	PMOs Contractor
Vehicular traffic and road safety risks for the local population particularly the students, PWDs and elderly persons.	<ul style="list-style-type: none"> · Schedule the delivery of materials during non-peak hours · Prohibit parking of construction vehicles on the road near the site 	<p>Monitor if measure is implemented by hauling vehicle</p> <p>Check complaints</p>	Part of cost of hauling vehicle; monitoring cost is part of construction management cost	Contractor PMOs
Chance Findings and/or cause damage on cultural and historical artifacts	<p>Implement the Chance Finds procedure in accordance with the requirements of the National Cultural Heritage Act (2009) and Cultural Properties Preservation and Protection Act</p> <p>Immediately suspend any activities upon discovery of chance find and report to the National Commission on Culture and Arts.</p>	Monitor implementation of chance find procedures	<p>Cost of mitigation measures to be shouldered by the contractor</p> <p>Monitoring costs: Included in staff time</p>	Contractor PMOs

Potential Risks and Impacts	Mitigating Measures	Monitoring Parameters	Costs of Mitigation/Monitoring	Institutional Arrangement
	Only resume work once clearance has been issued by the authorities.			
Lack of access to GRM	Project-level GRM developed, activated and disseminated before construction	# of GRM cases filed and addressed according to publicly-advertised procedures	Monitoring costs: Included in staff time	PMOs
Exclusion of vulnerable groups in project activities and consultations / inadequate stakeholder engagement	<p>Implement SEP</p> <p>Identify disadvantaged and vulnerable groups and IPs in the subproject areas.</p> <p>Use innovative communication means to reach the communities with information on the project.</p> <p>Establish GRM structures in the communities and sensitize the communities on the project GRM.</p> <p>Use local languages in communication and IEC materials.</p>	<ul style="list-style-type: none"> o # information disclosure strategies implemented o #of consultations with project-affected parties completed # of marginalized groups consulted o # of innovative and socially-inclusive strategies implemented (which will include use of local languages) 	Monitoring costs: Included in staff time	PMOs
Project Completion and Turn-over				
Abandoned construction site without proper disposal of construction debris	Conduct ESMP compliance monitoring	ESMP compliance report	Monitoring costs: Included in staff time	PMOs Contractor
Unresolved disputes or grievances from a particular	Set-up project GRM at all levels ensuring timely resolution of grievances	Grievance Resolution forms/report	Monitoring costs: Included in staff time	PMOs

Potential Risks and Impacts	Mitigating Measures	Monitoring Parameters	Costs of Mitigation/Monitoring	Institutional Arrangement
stakeholder leading to non-concurrence or approval of the completion and acceptance of the project.		% of grievances resolved		
Contractors' unsettled utility bills (i.e. electricity charges during construction period) charged to the school.	Include DepEd (school admin) during punchlisting	Punchlist	Monitoring costs: Included in staff time	PMOs Contractor

5. Capacity Development & Training

Based on the implementation arrangements and responsible parties proposed above, this section outlines any capacity building, training or new staffing that may be necessary for effective implementation.

6. Implementation Schedule and Cost Estimates

This section states the implementation timeline for the mitigation measures and capacity development measures described above, as well as a cost estimate for the implementation. The cost estimate can focus on the line items that will be covered by the project implementing agency, with costs of mitigation measures to be implemented by the contractor left to the contractor to calculate.

7. Attachments

ESCOPs, site specific SEP etc.

IV. Review & Approval

Prepared By:(Signature) Position: Date	
Reviewed By:(Signature) Position:Date	Approved By:(Signature) Position: Date

Annex 3: Environmental and Social Codes of Practice (ESCOP)

The ESCOP aims to provide guidance to the planning and implementation of the mitigation measures to be carried out by the Project Implementing Unit (PIU), Implementing offices (IOs) and contractors during civil works activities. It sets out the standard practices and procedures for managing the potential negative impacts on local environment and communities of all civil works to be carried out through measures to prevent adverse environmental impacts including monitoring and institutional arrangements on safeguards. The responsible parties are expected to follow these procedures and keep records and documentation of implementation of mitigation measures for periodic audits. The ESCOP will be included as an annex in all bidding documents.

The ESCOP is applicable to most construction and retrofitting activities. If significant impacts are identified based on the environment and social screening in Annex 1, the ESCOP is supplemented by the Environmental and Social Management Plan (ESMP) to address the site-specific impacts that have been identified. The ESCOP contains the following sub-plans:

1. ESCOP 1: Temporary Relocation of School Classrooms, Health Facility and other Building Utilities
2. ESCOP 2: General Construction Site Management
3. ESCOP 3: Worker's Health and Safety
4. ESCOP 4: Community Health and Safety
5. ESCOP 5: Cultural Properties

The contractors at the site level are the key entities responsible for the implementation of the ESCOP. DepEd-SIF-EFD and the DPWH BSPMC-UPMO, particularly the Safeguard Monitoring Unit and their focal persons, are responsible for supervision and monitoring of implementation of ESCOPs.

ESCOP 1: Temporary Relocation of School Classrooms, Health Facility and other Building Utilities

All the buildings targeted under the project have social significance and therefore construction activities will have the potential to disrupt education. The construction activities usually occur within 6–8 months, hence, the location of temporary classrooms and health facilities should be well-planned to ensure continuous operation of the building services.

A. Consultations

The DepEd-SIF-EFD, the DPWH BSPMC-UPMO and the design team should consult with the building administrators and other stakeholders such as faculty, medical staff, engineering staff, including students, patients and parents to hear their issues and concerns and preferences during programming of the project. This will be done during the detailed engineering design and before construction starts. Barangay and neighboring communities will also be consulted to inform them about the proposed project and to get their comments on proposed measures to management impacts and nuisance. Collaboration with representatives from the community in planning the temporary relocation site should be maximized to identify safe sites. The local government leaders may help provide suggestions on temporary relocation sites for school classrooms and health facilities if there are no available areas within the existing school or health facility compound.

There may also be economic enterprises inside the health facility or school that may be temporarily affected during the building's retrofitting. The canteen operators must also be consulted during the planning of the project.

The site survey and consultations aim to identify ways to minimize disruption of operation of the building and to develop an acceptable program of activities and the temporary relocation areas for classrooms, health facility, and other affected utilities.

B. Guidance on Selecting Areas for Temporary Classrooms

The project will keep in mind the health and safety of the surrounding areas to ensure that the temporary school site is conducive to learning of students.

- The site shall preferably be set up within the school compound in available rooms and areas of the school building that are not subject to retrofitting such as library, gymnasium, and quadrangle.
- Discuss with the school administration and stakeholders the implementation of flexible class schedules like shifts, weekend classes, and extension of classes during school breaks.
- Avoid locating the temporary classrooms near the main entrance where vehicles and materials delivery and other construction services may take place.
- Select a site with roofing or shade to protect teachers and students from exposure to sun or rain.
- Examine safety of the site and check against any hazardous areas such as noisy areas, falling debris, diggings, open electrical wires, and dusty surroundings. Provide temporary barricade for the classroom.
- Ensure that the temporary classroom has access to toilet facility.
- Ensure that the temporary area is provided with adequate lighting and ventilation.
- Ensure that there is provision for mobility of handicapped/disabled persons at the temporary site.

B. Guidance on Selection of Areas for Temporary Canteen

There may be instances where the canteen and other food concessionaires of the school or health facility may be affected by the building retrofitting activities. These economic enterprises or businesses are expected to be temporarily relocated within the same compound for continued operations and to avoid livelihood impacts. Consultation with the canteen operator /concessionaire should be conducted during the planning process to ensure that income of the operator and its staff are not adversely impacted. The following are considerations in the planning of the temporary site for the canteen:

- The temporary site must have safe and sanitary area for food preparation.
- The area must have access to electricity, water, and toilet.
- The temporary site must have safe and comfortable ventilation, lighting, flooring, and walls/barricade.
- There must be sufficient floor space for food preparation, food service, and passageways of people.
- There must be provision for waste bins.

ESCOP 2: General Construction Site Management

The ESCOP on construction site management provides the overarching guidelines with regards to construction and civil works to implement the building retrofitting activities and functional improvements, including removal of obstructions, installation of scaffoldings and falseworks, chipping of concrete and stripping down of targeted structures (walls, ceilings, columns, beams), welding and steelworks, concreting, application of epoxy, and finishing and restoration works. This ESCOP on site management sets out the measures to be applied to mitigate the potential impact of site activities to the building occupants, local residents, roads, and communities in the

immediate vicinity of the project site. The code refers to the requirements of the World Bank General Environment, Health and Safety (EHS) Guidelines and national laws and regulations.

The requirements of the ESCOP on construction site management shall be carried out by the contractor under the supervision of the DepEd-SIF-EFD and the DPWH BSPMC-UPMO. Further specific measures for each site may be identified through the contractor preparing the site-specific ESMP.

A. General Requirements Prior to Construction

Prior to site mobilization, the contractor together with the IO and PIU will conduct the joint site inspection and consultation with the building owner or end-user of school or health facility (administrator, engineering staff, and other personnel) as well as affected stakeholders (e.g. canteen, adjacent residential houses, barangay) to discuss and identify areas of concern such as: area for storage of stockpile of materials, disposal area for construction debris, planned camp site and yard areas, temporary relocation of any utility, classroom or health facility, health and environmental issues, potential hazards, vehicle and security management, programming of work schedule, and project organization and staff assignment.

During the site inspection, the Environment, Safety and Health (EHS) Officer of the contractor in coordination with the Safeguards Monitoring Unit and assigned EHS Focal Person at the IO will identify and discuss with the stakeholders the site readiness requirements and the measures to be implemented to manage impacts and disturbance. Mitigation measures will be designed to include details of the controls with regard to general site layout and operations, working hours, drainage, site lighting, security, emergency planning and response, and worker access and safety. Whenever feasible, the program of the retrofitting works must be planned in a section-by-section basis to minimize disturbance. The contractor will prepare the site-specific ESMP/ECOP and site general layout reflecting the area covered by the project site and the corresponding locations of camp site, temporary facilities for materials stock area and waste/debris collection area, barricades/fences, and area for mobility of equipment at site.

B. Prohibitions During Construction

The following activities are prohibited on or near the project site:

1. Cutting of trees for any reason outside the approved construction area;
2. Use of unapproved toxic materials, including lead-based paints, asbestos, etc.;
3. Deposition of chemicals, sanitary wastewater, spoil, waste oil, and concrete agitator washings in watercourses;
4. Disturbance to anything with archaeological or historical value;
5. Use of alcohol and prohibited drugs by workers at the workplace;
6. Employment of workers under the age of 18;
7. Discrimination regarding recruitment, wages and compensation.

C. Requirements During Construction

1. Materials Management

Materials that will be utilized for the retrofitting of buildings and construction of functional improvements include cement, epoxy, aggregates, sand, steel braces/jackets, and reinforcing steel. The bulky materials (cement bags, aggregates, sand, steel braces/jackets and reinforcing steel) will require some space within the

site, hence, a materials management plan is necessary to avoid disturbance and ensure safety in the construction site. During delivery of the materials at the site, spill of materials while in transit may cause also road accidents. The following materials management measures are proposed:

- Where possible, avoid stockpiles by only ordering the supplies needed.
- Stockpiles of aggregates and sand should be placed at least 10 meters away from any canal or surface water.
- Stockpiles of aggregates should be provided with sediment control measures such as silt traps.
- Cement bags should be covered with tarpaulin.
- Coordinate the schedule of delivery of materials with the school/health facility administration.
- Ensure materials stockpiles are placed in a safe and secure area within the facility approved by the school/health facility administration.
- Schedule delivery of materials weekly to limit movement of delivery vehicles to the site.
- Provide barricade on stockpile of materials
- Provide spill kit on site for oils.

2. Waste Management

Wastes that will be generated during the construction activities will include debris such as excavated soil for foundation works, concrete debris from chipping and stripping down of structural parts, pieces of rebars, wires, nails, broken glass, wood, pipes, empty containers of paint, solvents, strippers, epoxy resins, adhesives, degreasers, oily rags, used oil, spent welding electrode sticks/rods, busted lamps, among others. The excavation of substructure and foundation may also result to cut soil. There may also be food wastes generated by workers and other ordinary solid wastes (bits of paper, plastics, and packaging materials). Except for the empty containers of paints, solvents, epoxy resins, adhesives, degreasers, oil rags, and busted lamps which are classified as hazardous wastes, most of the wastes are considered as inert and non-hazardous wastes. Before construction, a solid waste management procedure (storage, provision of bins, site clean-up schedule, bin clean-out schedule, etc.) must be prepared by the contractor. Arrangements with a solid waste transporter licensed by the local government must be obtained. Likewise, a temporary site for the waste area that is recommended/approved by the school or health facility at the site must be identified beforehand where waste segregation containers will be provided by the contractor. Waste containers shall be provided with cover to avoid tipping by animals.

After a day's work, workers are required to clean the work area. All materials and tools are stowed accordingly in preparation for the next day's work. This will also enhance efficiency and assist in maintaining a safe environment when workers return to work the next day. Wastes are properly sorted and disposed of in different waste bins or garbage containers. Discussed in the succeeding sections are the measures to manage the different types of wastes during the retrofitting activities.

Non-Hazardous Waste

The non-hazardous waste should be placed in waste segregation bins such as for biodegradable waste (food wastes), recyclable waste (wires, pipes, rebars, and other pieces of metal), and hazardous waste. Excavated soil will be used as filling materials while other recyclable materials such as wooden planks may be used for formworks and scaffolding. The recyclable materials will be collected and separated onsite from other waste sources for reuse or for sale. Burning of garbage and construction wastes shall be strictly prohibited at the site. Likewise, access by unauthorized personnel at the worksite should be controlled. Materials which are clearly a danger to building occupants e.g. exposed nails, broken glass, steel beams etc. should be properly collected to

avoid accidents. Work areas will be maintained clear of waste materials and obstructions. Stockpiles of waste materials will not be allowed, instead, the wastes will be compacted and kept out of the way in accordance with the Occupational Safety and Health Program per DWPH D.O. 13 series 1998.

Hazardous Waste

Hazardous waste should always be segregated from the non-hazardous wastes. Designate an area for the temporary storage of empty containers (paints, solvents, epoxy resins, adhesives, degreasers), oily rags, and busted lamps. Proper labels should be affixed on these types of hazardous wastes. As a hazardous waste generator, the contractor is required to secure a Hazardous Waste Generator Registration with the DENR and to commission the services of a DENR-registered hazardous waste transporter and treater for the collection and disposal of hazardous wastes. A Hazardous Waste Manifest must be completed to document the amount of hazardous waste generated and collected/disposed for offsite treatment. The DENR-recognized treater should issue a Certificate of Treatment (COT) ascertaining the safe treatment and disposal of the hazardous waste. The COT records shall be kept for proper documentation.

Asbestos Containing Materials

There may be situations wherein the affected building section may contain asbestos materials as high density products in roofing and flat sheets/walls of existing building. The use of amosite (brown) and crocidolite (blue) asbestos fibers and of products containing these fibers is strictly prohibited and that no spraying of all forms of asbestos in buildings is allowed. The contractor must undertake specific precautions if materials containing asbestos are present or encountered during works in order to ensure the protection of workers and occupants of the building. Asbestos fibers may be carried to the lungs. Prolonged and cumulative exposure is harmful and may cause asbestos-related diseases. The procedure for handling asbestos materials must comply with the DENR Chemical Control Order on asbestos and the DOLE Order No. 154, series of 2016 on the management of asbestos in the workplace.

In case asbestos materials is encountered at the work site, the following procedures should be followed:

- Notify the DENR of the proposed removal work and coordinate the activities with the DOLE regarding the methods to be employed, inspections, decontamination, control monitoring and clearance inspections.
- The removal work must be assigned to a suitably qualified asbestos removal specialist.
- Isolate the site and provide barriers
- Restrict access from the general public to the site
- Erect appropriate signs and keep all access points locked at all times
- Following removal works, all surfaces are to be thoroughly cleaned using HEPA filtered vacuum and wet pipe techniques.
- On completion, the site must be carefully checked for visible asbestos containing materials.
- Any asbestos materials must be placed into asbestos plastic bags and then removed from the site by DENR-licensed waste transporter and treater.
- A hazardous waste manifest shall be completed for the transport, treatment and disposal of asbestos wastes offsite.

3. Air quality

Dust and Emissions. The retrofitting and construction activities may generate dust and fine materials from chipping and drilling of concrete which can cause degradation of ambient air quality and indoor air quality. Air

quality issues may also arise from stockpile of excavated soil and aggregate and sand materials where during dry and windy conditions may be carried by wind. Dust is an environmental issue and a health and safety issue. The movement of hauling vehicles to the site during delivery of materials may also cause emissions.

Odor from Epoxy and Paint/Solvent Fumes. Odor from the application of epoxy resin, paint and solvent may also be generated. Workers may be exposed to fumes that can cause irritation of the nose, throat, and lungs. Workers applying epoxy resin and paint should be provided with respiratory mask. The area should be well-ventilated. Welding Fumes and Gases. Air quality may also be affected during the welding of steel plates and cutting of steel. Workers are the ones directly exposed to this hazard. Overexposure to welding fumes and gases can cause health problems like respiratory illnesses.

To manage and mitigate these impacts and risks, the following measures will be implemented:

- For indoor concrete chipping and drilling, enclose the construction area with impermeable dust barriers and use industrial air vacuum pumps and ventilation exhaust fans to minimize spread and spillover of dust.
- For chipping/drilling activities on the exterior surface of the building, install nets/sheeting and temporary screens.
- Require workers to wear particle masks.
- Keep stockpile of aggregate and sand materials covered with well-fixed plastic sheeting, tarpaulins or other geotextiles to avoid suspension or dispersal of fine soil particles during dry and windy days.
- Equip concrete mixing equipment with dust shrouds.
- Periodically clean debris.
- Maintenance of hauling vehicles to ensure compliance with the motor vehicle emissions standards.
- Prohibit idling of construction vehicles while unloading materials at the site.
- Provide welders with PPE appropriate for welding activities and provide adequate ventilation and local exhaust to keep fumes and gases from the breathing zone and the general area.

4. Noise

Noise during construction may occur during operation of equipment and movement of delivery vehicles at the site. Noise caused by operation of machinery coupled by haulage vehicles can cause nuisance. It could disrupt ongoing classes or cause nuisance to patients. Workers are also directly exposed to noise. In order to avoid the risks and impacts of noise, the following measures are recommended:

- Coordinate with the administration of the school or health facility on the schedule of construction activities that will minimize disruption of facility operation
- Provide temporary anti-noise barriers to barricade the construction area and shield sensitive receptors
- Strictly prohibit concrete chipping and drilling activities beyond 9:00PM particularly in areas near sensitive receptors and residential areas
- Deliver fabricated steel plates and cut/bend reinforcing steel to desired size to minimize cutting activities onsite.
- Require workers to wear ear plugs
- Ensure that operation of the equipment complies with the noise standards for Class AA (schools and hospitals).

5. Drainage

Not all construction activities may necessarily require retrofitting of footings, but all design activities start with the investigation of the symptoms of structural problems and failures in the foundation. This is performed through digging of sample or selected footings to determine indicators of structural concern and determine where repair is necessary. During the excavation for the retrofitting of foundations, the excavated soil may cause soil erosion during rainfall events. Storm water runoff may carry soil into canals and reduce the water-carrying capacity of the canal that could contribute to flooding during heavy rains. Excessive soil runoff may also lead to sedimentation of creeks and rivers. Another potential risk of soil runoff is from the residues from cement mixers and washing of equipment which could likewise clog canals.

In order to avoid impacts on drainage, the following measures must be implemented:

- Avoid earthworks during rainy months.
- Stockpile excavated soil (including aggregates and sand) away from drainage canals and water courses.
- Stockpiles of excavated soil and aggregates/sand should be provided with sediment control measures such as silt traps, barriers and trenches.
- Prohibit washing of cement mixers and other construction vehicles at the site
- Conduct daily cleaning and sweeping of the construction site and periodically remove soil, stones and wastes from gutters, drainage canals and ditches.
- During rain events, check the drainage system to see if these are blocked. Remove materials and wastes that have been swept away by stormwater.

5. Water Pollution

Domestic sewage will be generated during construction due to the presence of workers at the site. If there is no proper toilets at the site, improper disposal of sewage may cause unsanitary conditions in the premises. Therefore, appropriate wastewater management measures will be necessary such as provision of temporary toilet facilities or portable toilets (“portalets”). These facilities will be kept clean and sanitary at all times.

The portalets should be located more than 30 meters from an existing water supply well or surface water body and should be located in a place where its odor cannot reach busy areas of the compound. The portalets should have available water and hand washing facilities.

6. Site Security

The presence of workers in the school or health facility compound may pose risks to peace and order and security of the area. In order to avoid any untoward incidents, the contractor will be required to undertake the following:

- Security workers will be assigned to protect the construction sites, project workers and other stakeholders.
- Submit names of workers to the school/health facility and the Barangay.
- All workers will secure IDs or construction work pass from the school/health facility and from the Barangay.
- Restrict entry of unauthorized persons inside the construction site.

ESCOP 3: Worker Health and Safety

Hazards of construction activities may cause adverse effects to health and safety of construction workers. Occupational hazards include ergonomic hazards from carrying/lifting heavy materials and equipment, exposure to excessive and continuous noise, exposure to hazardous materials, hotworks (i.e. welding), working in height and use of scaffoldings, and spread of communicable diseases such as COVID-19. There is slightly elevated risk of COVID-19 transmission when working in health facilities. The contractor will be required to undertake the following:

- Implement a Construction Safety and Management Plan in compliance with the DOLE OSH guidelines
- Designate an onsite Safety Officer duly accredited by DOLE
- Assign a contact person onsite to receive/respond to complaints from the barangay/community; provide the name/contact number of the responsible person to the Barangay.
- Require workers to wear safety gadgets/PPEs such as hard hats, gloves, safety belts, rubber boots, and goggles, appropriate to the task.
- Post safety signs/reminders in strategic areas within the construction area
- Provide sufficient lighting at night.
- Provide barricades / safety barriers particularly at excavations and stockpiles of aggregates.
- Provide first-aid station within the construction site to ensure immediate medical attention in case of accidents.
- Comply with the COVID-19 health and safety protocols in compliance with DPWH DO No. 38, series of 2020.

Working in Height. Workers safety may be at risk if scaffolding platform and height do not conform with the standards for safety. The scaffolds must be installed following the requirements of the National Building Code. For scaffolds with a platform height of under 2 m, the contractor is required to provide external strengthening. If the platform is 2 m in height or over, the ratio must of 3:1 wherein the width of the base of the scaffold must be at least $\frac{1}{2}$ or $\frac{1}{3}$ the height of the platform. When working in height, the workers will be required to wear harness as support and protection.

COVID-19. The workers are required to follow the basic hygiene procedures at all times to prevent the transmission of COVID-19. The detailed measures are outlined in Annex H. In general, the contractor should present follow the guidelines of the Inter-Agency Task Force on COVID-19 and the DOH. Workers to be deployed at the worksite should be undergo COVID-19 tests. Number of personnel at the site will be limited. Disinfection and temperature monitoring will be undertaken on a daily basis.

DPWH Engineers assigned at the site shall ensure strict compliance to DOLE D.O. 13, series of 1998, and implementation of wearing of PPE such as face masks, safety glasses/goggles, face shields, and long sleeve Tshirts, to contain the spread of COVID-19 in the workplace.

Hazards of construction activities may cause adverse effects to health and safety of construction workers. Occupational hazards include ergonomic hazards from carrying/lifting heavy materials and equipment, exposure to excessive and continuous noise, exposure to hazardous materials, hotworks (i.e. welding), working in height and use of scaffoldings, and spread of communicable diseases such as COVID-19. There is slightly elevated risk of COVID-19 transmission when working in health facilities. The contractor will be required to undertake the following:

- Implement a Construction Safety and Management Plan in compliance with the DOLE OSH guidelines

- Designate an onsite Safety Officer duly accredited by DOLE
- Assign a contact person onsite to receive/respond to complaints from the barangay/community; provide the name/contact number of the responsible person to the Barangay.
- Require workers to wear safety gadgets/PPEs such as hard hats, gloves, safety belts, rubber boots, and goggles, appropriate to the task.
- Post safety signs/reminders in strategic areas within the construction area
- Provide sufficient lighting at night.
- Provide barricades / safety barriers particularly at excavations and stockpiles of aggregates.
- Provide first-aid station within the construction site to ensure immediate medical attention in case of accidents.
- Comply with the COVID-19 health and safety protocols in compliance with DPWH DO No. 38, series of 2020.

Working in Height. Workers safety may be at risk if scaffolding platform and height do not conform with the standards for safety. The scaffolds must be installed following the requirements of the National Building Code. For scaffolds with a platform height of under 2 m, the contractor is required to provide external strengthening. If the platform is 2 m in height or over, the ratio must of 3:1 wherein the width of the base of the scaffold must be at least ½ or 1/3 the height of the platform. When working in height, the workers will be required to wear harness as support and protection.

COVID-19. The workers are required to follow the basic hygiene procedures at all times to prevent the transmission of COVID-19. The detailed measures are outlined in Annex H. In general, the contractor should present follow the guidelines of the Inter-Agency Task Force on COVID-19 and the DOH. Workers to be deployed at the worksite should be undergo COVID-19 tests. Number of personnel at the site will be limited. Disinfection and temperature monitoring will be undertaken on a daily basis.

DPWH Engineers assigned at the site shall ensure strict compliance to DOLE D.O. 13, series of 1998, and implementation of wearing of PPE such as face masks, safety glasses/goggles, face shields, and long sleeve Tshirts, to contain the spread of COVID-19 in the workplace.

ESCOP 4: Community Health and Safety

The potential risks to health and safety of community associated with the project activities include nuisance from noise, airborne dust, falling debris, and congestion of roads adjacent to the sites during delivery of materials. Some of the schools and health facilities are in community areas which can be accessed through narrow roads. The movement of large delivery truck to these areas may block roads.

In order to manage community and health issues, the following mitigation measures will be implemented:

- Conduct consultations with neighboring communities and Barangay about the project and the schedule of works.
- When working on the exterior of the building, provide safety nets/screens for protection of adjacent properties and passersby.
- Install canopy if the building is next to a road or building that may be affected by falling debris.

ESCOP 5: Cultural Heritage

Contracts for civil works involving excavations will incorporate procedures for dealing with situations in which buried Physical Cultural Resources (PCR) are unexpectedly encountered. The final form of these procedures will depend upon the local regulatory environment, including any chance find procedures already incorporated in legislation dealing with antiquities or archeology. Resource persons from the Cultural Properties Division of the National Museum are the designated officials in-charge of these matters.

PCR is defined as Movable or immovable objects, sites, structures or groups of structures having archeological, paleontological, historical, architectural, religious, aesthetic, or other cultural significance.

The following are also specifically defined under the new Act.

- (a) "Built Heritage" shall refer to architectural and engineering structures, such as but not limited to bridges, government buildings, houses of ancestry, traditional dwellings, quartels, train stations, lighthouses, small ports, educational technological and industrial complexes, and their settings, and landscapes with notable historical and cultural significance;
- (b) "Cultural Heritage" shall refer to the totality of cultural property preserved and developed through time and passed on to posterity;
- (c) "Cultural Property" shall refer to all products of human creativity by which a people and a nation reveal their identity, including churches, mosques and other places of religious worship, schools and natural history specimens and sites, whether public or privately-owned, movable or immovable, and tangible or intangible;
- (d) "Important Cultural Property (ICP)" shall refer to a cultural property having exceptional cultural, artistic, and historical significance to the Philippines, as shall be determined by the National Museum and/or National Historical Institute.
- (e) "Tangible cultural property" shall refer to a cultural property with historical, archival, anthropological, archaeological, artistic and architectural value, and with exceptional or traditional production, whether of Philippine origin or not, including antiques and natural history specimens with significant value.
- (f) Indigenous properties - The appropriate cultural agency in consultation with the National Commission on Indigenous Peoples shall establish a program and promulgate regulations to assist indigenous people in preserving their particular cultural and historical properties.

The chance find procedure is used in case of accidental discovery of an artifact or fossil of possible cultural or historical significance. The procedure in this ESMF describes a physical cultural resources management plan that includes measures to avoid or mitigate any adverse impacts on physical cultural resources; measures needed for managing any chance find; and the reporting system to authorities.

In compliance with the requirements of the National Cultural Heritage Act of 2009 (Republic Act 10066), National Museum Act of 1998 (Republic Act 8492) and Cultural Properties Preservation and Protection Act (Presidential Decree 374), cultural treasures and properties that will be accidentally found at the site will be surrendered to the National Museum through the Cultural Properties Regulation Division. The chance find procedure will be implemented and disseminated to contractors and its workers. Contractors will be made aware of cultural properties to look out for that may have heritage, cultural, social and spiritual significance such as pottery, ceramics, wrought iron, gold, bronze, silver, wood or other heraldic items, metals, coins, medals, badges, insignias, coat of arms, crests, flags, arms and armor, furniture, carvings, paintings, sculptures, jewelry, and other objects classified as antiques. The chance find procedure will include the following:

- (a) Immediately stop work if a suspected find is discovered at the site and contact the National Museum to report the chance find. Simultaneously, coordinate the matter with the local government unit's Department of Tourism, Culture and Arts of Manila (DTCAM).
- (b) Record details in the incident report and take photos of the find.
- (c) Secure the area to prevent any damage or loss of removable objects. In cases of removable antiques or sensitive and delicate artifacts and relics, a night guard will be assigned to secure the area until the representative from the National Museum takes over to assess the artifact and the site.
- (d) The decision to remove the artifact or relic will be taken by the authorities from the National Museum.
- (e) Construction activities will resume only after permission is granted from the National Museum.
- (f) The suspension of excavation activities shall be lifted only upon the written authority of the National Museum or the National Historical Institute and only after the systematic recovery of the archaeological materials.

Annex 4. Summary of Stakeholder Inputs

No.	Type of Stakeholders	Area of discussion	Issues, concerns, queries and recommendations	Response of project team/Next steps
1	<p>Affected Parties (DepEd Region, Schools Division, DPWH Central Office, school administrators, and barangay officials)</p> <p>Other interested parties (NEDA Region)</p>	Overall Project design	<ul style="list-style-type: none"> • Schools visited asked if their school was certain to be included in the project • What will the project cover, will the project interventions include for example construction of riprap, drainage systems, canals, administration buildings, in case these are needed to ensure resiliency of the school? • When will the project start? • Does the design of the infrastructure address different kinds of hazards? • NEDA Regional recommended to look at the proportion of distribution of beneficiary schools by region, division • Will LGUs have a budget counterpart in the project? 	<ul style="list-style-type: none"> • The project includes a prioritization criteria framework to select the final school beneficiaries. The finalization of the list of priority schools is the responsibility of DepED and DPWH. • The project has four (4) levels of intervention: repair and rehabilitation (simple works) and retrofitting and reconstruction (complex works). The project includes conducting detailed damage assessments and multi-hazard vulnerability assessments. The project will consider including the need to improve the drainage system or the need for a riprap. • The Project is in the process of preparing the necessary documentary requirements for its approval. It is hoped to be implemented by next year, 2024 • Recovered school buildings by the project will fully comply with the country's up-to-date multi-hazard resilient design provisions • Spatial distribution is a consideration • GoP counterpart will be from DepED not the LGU
2	Affected Parties (DepEd Region, Schools Division, DPWH Central Office, school administrators, parents and barangay officials)	Type of calamities/ disasters that affected the schools	<ul style="list-style-type: none"> • The schools visited were either affected by strong typhoons, flooding, wind hazards, and earthquake or a combination of hazards. • In Ilocos, aside from damages due to earthquake and typhoons, one of the school buildings was burned due to faulty wiring • Road elevation is higher than the school grounds and without proper drainage system causing flooding in the school 	<ul style="list-style-type: none"> • It was emphasized that the project's target beneficiaries are disaster-affected schools. • The project will consider site development to address drainage issues and ensure proper ventilation as design considerations

No.	Type of Stakeholders	Area of discussion	Issues, concerns, queries and recommendations	Response of project team/Next steps
			<ul style="list-style-type: none"> • Extreme heat was mentioned as a hazard that greatly affected the conduciveness of the learning environment • In Albay, one of the schools said it was usually used as evacuation center during calamities, especially that they are located within the 8km danger zone of the Mayon Volcano. Alternative modes of teaching are implemented by the school in such cases. 	
3	Affected Parties (DepEd Region, Schools Division, DPWH Central Office and school administrators)	Implementation Arrangements	<ul style="list-style-type: none"> • Monitoring the compliance to environmental and social standards • Regardless if its DepED or DPWH, a major concern raised is the quality of work of the contractors • It was recommended to include DepED during punchlisting with DPWH 	<ul style="list-style-type: none"> • Implementation arrangements including the monitoring of compliance to quality of construction work as well as environmental and social standards will be agreed upon by DepED and DPWH as the implementing agencies of the project.
4	Affected Parties (DepEd Region, Schools Division, DPWH Central Office, school administrators, parents and barangay officials)	Stakeholder consultations and participation in school building design and construction	<ul style="list-style-type: none"> • There are various mechanisms in place for stakeholder consultation and participation i.e. PTA meetings; School Governance Council; “Voice of the learners”; Participation of School head, teachers, PTA, barangay captain during the pre-construction conferences where they are also given copies of the Program of Works (POW). • DepED is currently developing an application as a monitoring system that can be utilized by DepED Engineers and CSOs. It is hoped to be available by March 2024. 	The project will build on these mechanisms and further strengthen stakeholder participation in the whole project cycle (planning and design, implementation and monitoring).
5	Affected Parties (DepEd Region, Schools Division, school administrators, parents, students and barangay officials)	Grievance Redress Mechanism	<ul style="list-style-type: none"> • There is an existing mechanism (School Grievance Committee) • School Head must submit incident report within 24 hours • In Ilocos, PTA President asked if ever they observed substandard quality during the construction can they report it. 	<ul style="list-style-type: none"> • It was relayed that everyone has the right to file a project-related complaint. • DepED and DPWH will finalize implementation arrangements including for the GRM

No.	Type of Stakeholders	Area of discussion	Issues, concerns, queries and recommendations	Response of project team/Next steps
			If yes, to whom can they report.	
6	Affected Parties (DepEd Region, Schools Division, school administrators, guidance councilors, parents, students and barangay officials)	Gender based violence (GBV) and SEA/SH	<ul style="list-style-type: none"> No cases of GBV and SEA/SH hence they have no experience yet in handling such cases Teachers have no guidelines in handling GBV cases As per DepED policy, the Child Protection Committee handles such cases, if any. The Guidance Councilor is the point person whom students can report such cases. They can also report to the barangay VAWC desk officer. 	<ul style="list-style-type: none"> The project will ensure that students/children feel safe to access the GRM without fear of retribution There is a need to increase awareness about GBV at the school level. This shall be included among the capacity building needs of the project.
7	Affected Parties (DepEd Region, Schools Division, school administrators, parents, students and barangay officials)	Universal access and gender inclusive school infrastructure	<ul style="list-style-type: none"> Visited schools were not compliant to accessibility law (no ramps, no toilets for PWDs) There is a shared CR for every classroom. Some schools have constructed separate toilet for girls and boys located outside the school building 	The project design shall include addressing the need for functional improvements for PWD students, teachers and other school users as well as WASH facilities that are gender inclusive.
8	Affected Parties (School Head/Principal)	Land ownership of school site	<ul style="list-style-type: none"> Badio Elementary School, Pinili, Ilocos Norte – titled to the school San Nicolas – still for titling (only have a Tax Declaration for now) – but the titling expenses are already included in the 2024 budget Tambilagao Elem School, Albay – with Deed of Donation 	It was relayed that there will be no land acquisition for this project. All subprojects are existing school sites with no land issues.
9	Affected Parties (DepEd Region, Schools Division, school administrators, parents, students and barangay officials)	Community health and safety related to construction activities	<ul style="list-style-type: none"> Main concern of parents and teachers is the safety of the children during construction. Barriers should be placed as well as warning signs. Warning Signs should be in the local language with English translation. Construction may cause class disruptions. If feasible, construction activities will be done during school break and/or adopt hybrid or modular classes if the 	The project prioritizes the safety of the community and school population. The recommendations will be taken into consideration by the project.

No.	Type of Stakeholders	Area of discussion	Issues, concerns, queries and recommendations	Response of project team/Next steps
			<p>construction cannot be avoided during class days.</p> <ul style="list-style-type: none"> Regarding the hauling of materials, the school can assign entrance/exit points and the barangay can help with traffic management 	
10	Affected Parties (DepEd Region, Schools Division, school administrators, parents, and barangay officials)	Occupational Health and safety	<ul style="list-style-type: none"> Schools said they have spaces for worker's camps/bunk houses Restricted areas should be designated to ensure safety of the school community Follow DOLE policy – 10% of skilled workers and 30% of unskilled workers should come from the local community 	The project prioritizes the safety of the community and school population. The recommendations will be taken into consideration by the project.
11	Affected Parties (DepEd Region, Schools Division, school administrators, parents, students and barangay officials)	Current peace and order conditions	<ul style="list-style-type: none"> Region 1 is insurgency free as per DepED Regional Director 	This information was noted by the project team.
12	Affected Parties (DepEd Region, Schools Division, and DPWH Central Office)	Environmental permits (i.e. ECC/CNC)	<ul style="list-style-type: none"> Tree cutting permit c/o School Principal Based on the experience of DepED, so far only CNC is applicable to the school construction activities they have undertaken 	Accountability in securing the necessary permits shall be among the agreements between DepED and DPWH.
13	Affected Parties (School administrators)	Water source and electricity	<ul style="list-style-type: none"> Schools in Ilocos Norte have water sources (i.e. ground water or connection from the water district) Ilocos Norte DepEd Division recommended to install solar panels as source of electricity for schools In Naga National High school water supply is a concern 	Currently the DepEd installs solar lights for the Last Mile Schools
14	Affected Parties (School administrators and barangay officials)	Waste Management	<ul style="list-style-type: none"> Pinili, Ilocos Norte –with Barangay-owned Materials Recovery Facility (MRF) The schools observe waste segregation 	The project will ensure that waste management is observed in the construction sites

No.	Type of Stakeholders	Area of discussion	Issues, concerns, queries and recommendations	Response of project team/Next steps
			<ul style="list-style-type: none"> • From the experience of the schools, construction debris are disposed of by the DPWH 	
15	Affected Parties (DepEd Region, Schools Division, school administrators, parents, students and barangay officials)	Needs aside from infrastructure to increase the resiliency of schools against calamities/natural disasters	<p>Continue the following existing practices:</p> <ul style="list-style-type: none"> • Capacity building i.e. First aid training; psychological first aid • Conduct of regular drills • DRRM education integrated in the curriculum 	The Project will take note to continue these good practices