E4677 v1



WORLD BANK



MINISTRY OF EDUCATION AND TRAINING

## **RENOVATION OF GENERAL EDUCATION PROJECT**

# ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK

(Draft version)

Oct, 2014

i

## Contents

Co	Contentsii				
I.	Introduction				
II.	II. Project Description7				
2	2.1	Proj	ject objectives7		
2	2.2	Proj	ject Components7		
	2.2	.1	Component 1: Curriculum Revision (\$26M)7		
	2.2 Ma	.2 terial	Component 2: Development of Aligned Pedagogical Texts and Learning s (\$29M)		
	2.2 of <b>(</b>	.3 Curric	Component 3: Learning Assessment and Analysis for Continuous Improvement culum and Policy (\$25M)		
	2.2	.4	Component 4: Project Management (\$5M)10		
2	2.3	Proj	iect target area:10		
2	2.4	Proj	ect management and personnel10		
III	. Pol	icy, I	Legal, and Administrative Framework11		
3	8.1	App	blicable National Laws and Regulations11		
3	8.2	Wo	rld Bank Safeguard Policies Triggered13		
3	8.3	Gap	analysis14		
IV.	. Pot	tentia	ll Project Impacts and Mitigation Measures15		
4	.1	Pote	ential positive impacts15		
4	.2	Pote	ential negative impacts15		
4	.3	Miti	igation measures16		
v.	En	viron	mental and Social Management Framework Process16		
5	5.1	Safe	eguard Screening for Subprojects/activities16		
	5.1	.1	Eligible subprojects/activities		
5 F	5.2 Projec	Safe ct	eguard Instruments Preparation for subprojects/activities supported under the		
5	5.3	Rev	iew, Approval, and Disclosure of Subproject Safeguards Instruments18		
	5.3	.1	Review and approval of safeguards instruments		
	5.3	.2	Public consultation and Information Disclosure		
5	5.4	Imp	lementation, Supervision, Monitoring, and Reporting21		
VI.	. Imj	plem	entation Arrangement21		

6.1	Responsibility for ESMF Implementation21			
6.2	Reporting Arrangements	23		
VII.C	apacity Building, Training, and Technical Assistance	24		
7.1	Institutional Capacity Assessment	24		
7.2	Training	25		
VIII.	ESMF Implementation Budget	25		
IX. G	rievance Redress Mechanism	26		
X. E	SMF Consultation and Disclosure	31		
XI. A	NNEXES	33		
Annex	a 1. Official letter for agreement of ESMF's content issued by MOET	33		
Annex	2. ENVIRONMENTAL AND SOCIAL SAFEGUARDS CHECKLIST	34		
Annex	x 3. Summaries of Selected Environmental and Legal Safeguard Policies	43		
Annex	4: Environmental Codes of Practice (ECOP) for Small Civil Works	53		
Annex	Annex 5: Environmental management plan (EMP) model60			
Annex	Annex 6: Guidance on Supervision of EMP Implementation64			

## List of tables

Table 1. World Bank Safeguards Policies Triggered by The Project	14
Table 2. The differences between Vietnamese regulations and WB's safeguard policies	14
Table 3. Summarization of environmental management procedures	18
Table 4: Institutional arrangement for ESMF implementation	22
Table 6 Proposed programs on capacity building on environmental management	25
Table 7. Cost estimation for ESMF	26
Table 8. Public consultation and disclosure of the ESMFObjective	31
Table 9.Category A Screening Criteria	35
Table 10.Category C Screening Criteria	39
Table 11.Potential Environmental and Social Impacts to be Addressed	41

## List of figures

Figure 1. Schematic Flowchart for Safeguard Screening for proposed subprojects/a	ctivities 20
Figure 2. System of environmental and safety reports	24
Figure 3. Grievance Redress Mechanism	31

## ABBREVIATIONS AND ACRONYMS

ADB	The Asian Development Bank
ADF	The Asian Development Bank
PMU	Project Management Unit
IT	Information Technology
CPS	Country Partnership Strategy
GEC	General Education Curriculum
DMCs	Developing Member Countries
BS for EM	Boarding School for Ethnic Minority students
EPP	Environmental Protection Plan
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
EM	Ethnic Minority
ESMF	Environmental and Social Management Framework
E&T	Education and Training
GDP	Gross Domestic Product
CE	Continuous Education
ТА	Technical Assistant
ICB	International Competitive Bidding
JFPR	Japan Fund for Poverty Reduction
JICA	Japan International Cooperation Agency
MoNRE	Ministry of Natural Resources and Environment
MIC	Middle Income Country
NCB	National Competitive Bidding
EM	Educational Management
ТВ	Textbook
ToR	Terms of Reference
PTSE	Professional Technical Secondary Education
PE	Primary Education
LSE	Lower Secondary Education
SE	Secondary Education
GD	Guidelines
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
WB	World Bank

## I. Introduction

Renovation of General Education Project, herein referred to as The Project, is executed by the Ministry of Education and Training (MOET) funded by the International Development Association (IDA) under the World Bank (WB). The overall objective of The Project is to effectively assist the renovation of the general education curriculum and textbooks to contribute to the development of high quality human resources to address the requirements the country's industrialization and modernization.

As funded by WB, for safeguard aspects, The Project will comply with both Vietnamese legislations and the World Bank Safeguard Policies. By design, the Project shall finance activities which support to the renovation of general education curriculum (GEC) such as consultation services, organization of meetings, seminars, capacity buildings and construction/refurbishment of small to medium-scale buildings. By environmental aspects, during construction/refurbishment of buildings, negative impacts related to environment and social is likely to occur if sound mitigation measures are not be implemented and monitored. In this appraisal phase of the project, the location and design of the eventual buildings are not all known by that traditional safeguards instruments (e.g., an environmental impact assessment or environmental protection commitment) cannot be prepared before appraisal for those buildings with unknown location and designs. Therefore, an environmental and social management framework (ESMF) is prepared by the MOET to ensure that the construction of buildings would be implemented in an environmentally and socially sustainable manner.

The ESMF sets out the principles, rules, guidelines and procedures to be followed during implementation such as screening and assessing the environmental and social impacts of construction/refurbishment. determining the category of the subproject having construction/refurbishment activities and policies triggered and, identifying specific instrument/s to be prepared for the subproject, institutional arrangement and capacity building and grievance redress. It contains measures and plans to reduce, mitigate and/or offset adverse impacts and enhance positive impacts, provisions for estimating and budgeting the costs of such measures, and information on the agency or agencies responsible for addressing project impacts. The ESMF will be incorporated into the Project Implementation Manual to ensure that environmental and social issues will be considered together with other requirements during project implementation.

The scope of this ESMF: the ESMF focuses on safeguard issues of the construction/improvement of small to medium buildings (likely at least two new buildings constructed and six others improved) that shall be financed by The Project in component 3 "Support the exams, tests, and general education quality assessment reform"

To address to the objectives mentioned above, the outline of ESMF shall be as follows:

1. INTRODUCTION

## 2. **PROJECT DESCRIPTION**

3. POLICY, LEGAL, AND ADMINISTRATIVE FRAMEWORK

3. 1 Applicable National Laws and Regulations

3.2 World Bank Safeguards Policies Triggered

3.3 Gap Analysis

#### 4. POTENTIAL PROJECT IMPACTS AND MITIGATION MEASURES

## 5. **PROCEDURES FOR REVIEW, CLEARANCE, AND IMPLEMENTATION OF** SUBPROJECT SAFEGUARD INSTRUMENTS

5.1 Safeguard Screening and Impact Assessment

5.2 Development of Subproject Documentation

- 5.3 Review, Approval, and Disclosure of Subproject Safeguards Instruments
- 5.4 Implementation, Supervision, Monitoring, and Reporting

## 6. IMPLEMENTATION ARRANGEMENTS

- 6.1 Responsibility for ESMF Implementation
- 6.2 Reporting Arrangements
- 6.3. Incorporation of ESMF into Project Operational Manual
- 7. CAPACITY BUILDING, TRAINING, AND TECHNICAL ASSISTANCE
  - 7.1 Institutional Capacity Assessment
  - 7.2 Training
  - 7.3 Technical Assistance
- 8. ESMF IMPLEMENTATION BUDGET
- 9. GRIEVANCE AND REDRESS MECHANISM
- **10.** ESMF CONSULTATION AND DISCLOSURE

ANNEXES

## **II.** Project Description

## 2.1 Project objectives

The Project Development Objectives is to raise student learning outcomes and improve relevance by (i) revising and implementing the curriculum following a competency-based approach; and (ii) to improving the effectiveness of teaching by creating and disseminating textbooks aligned with it.

## **2.2 Project Components**

## 2.2.1 Component 1: Curriculum Revision (\$26M)

This component will support the development of a revised curriculum for all school subjects at all grade levels. The new curriculum will seek to promote the acquisition of both competencies (problem-solving, teamwork, self-management of learning, self-management, and communication) and content knowledge. The Project will directly support and finance aspects of the MOET curriculum revision apparatus and continuously provide that apparatus with high-quality technical input relevant to the revision process. Three subcomponents will house the mechanisms that create the inputs for the revisions of the curriculum and the training of teachers for its implementation.

#### 2.2.1.1. Subcomponent 1.1: Revision of the Curriculum.

This subcomponent will support the creation and work of a Core Technical Committee for Curriculum Revision (CTC) plus up to 11 Subject Specific Technical Committees (SSTCs). The CTC will be composed of the chairpersons of each SSTC. The CTC will carry out the main curriculum revision, with the technical "legwork" conducted in each of the SSTCs. The work of the CTC will ensure that the curriculum is coherent and coordinated across subjects and years. Outputs of the work of the CTC and the SSTCs will be, inter alia: (i) comprehensive micro-level reviews of Vietnam's existing curriculum; (ii) partial and selective reviews of other countries' successful "general curricula" (including their definitions of key terms, desired characteristics of graduates, selection of specific subjects, and basic first-order time allocations); (iii) draft subject-specific curricula; (iv) indicative menus of pedagogical approaches and learning resources aligned with the new curriculum; and (v) guidance for the development and evaluation of textbooks and other pedagogical materials.

#### 2.2.1.2. Subcomponent 1.2: Training to Prepare Teachers for the New Curriculum.

This subcomponent will: (i) develop a comprehensive on-line training system through which teachers can be certified as knowledgeable about the new curriculum and ready to teach it; and (ii) sponsor a cadre of highly trained "curriculum champions" who will act as peer coaches for fellow teachers as they seek to understand and implement the new curriculum; and (iii) develop and deliver additional face-to-face and asynchronous dissemination and training materials for the curriculum.

# **2.2.1.3.** Subcomponent **1.3:** Guidance for Developers of Pedagogical Materials and Textbooks.

Texts and pedagogical materials must be aligned with the Learning Outcome Standards for the new curriculum. Under this subcomponent, the CTC will lead the development of detailed guidance for developers to textbooks and pedagogical materials. This output will facilitate the rapid development of diverse sets of text and supplementary pedagogical materials, all aligned with the new curriculum.

# 2.2.2 Component 2: Development of Aligned Pedagogical Texts and Learning Materials (\$29M)

This component will support the development a set of textbooks aligned with the new curriculum and the provision of aligned textbooks to schools with high numbers of economically-disadvantaged students.

# **2.2.2.1.** Subcomponent 2.1: Direct Development of Textbooks Aligned with the New Curriculum.

Once the new curriculum is completed and officially adopted by MOET, the CTC and the SSTC will be "converted" into mechanisms to develop a set of textbooks aligned with the new Learning Outcome Standards. The CTC and its members will migrate to the role of "appraisers" of textbooks while the SSTCs will add editors and textbook writers to the subject-specific expertise embodied in the SSTC membership. The enhanced SSTC committee will work under a management structure of subject specific editors and a general

editor. This structure will preserve the institutional memory and knowledge of the nature of the new curriculum, and allow this to guide the development of aligned texts.

## 2.2.2.2. Subcomponent 2.2: Appraisal of Pedagogical Materials and Textbooks.

Under this subcomponent, the CTC will review and appraise the extent to which texts align with the new curriculum and are therefore suitable for classroom use and official adoption by MOET. The CTCs recommendations on textbook alignment will be transmitted to the Steering Committee, which will make final decisions on the authorization of textbooks.

# 2.2.2.3. Subcomponent 2.3: Provision of Texts and Pedagogical Materials to Disadvantaged Schools.

Under this subcomponent, the Project will provide sets of textbooks to schools whose students are most economically-disadvantaged.

# 2.2.3 Component 3: Learning Assessment and Analysis for Continuous Improvement of Curriculum and Policy (\$25M)

This component will ensure that the new curriculum is properly adopted and administered by Vietnamese schools. Furthermore, it will focus on understanding and reducing learning and achievement gaps within the Vietnamese public education system.

#### 2.2.3.1. Subcomponent 3.1: Curriculum Roll Out and School-level Support.

This subcomponent will ensure that the new curriculum is adopted and understood by all schools in the Vietnamese public education system. A "curriculum champion"—that is, a teacher or administrator who has been formally trained to oversee the application of the new curriculum and explain changes to his or her colleagues—will be designated for every public school and every local and provincial DOET. This subcomponent will support: (i) the search and selection process for curriculum champions; (ii) the training of curriculum champions; and (iii) continued assistance for curriculum champions as the curriculum is adopted throughout Vietnam. This subcomponent is based on the success of the curriculum champion model during Hong Kong's recent curriculum reform process.

#### 2.2.3.2. Subcomponent 3.2: Expansion of the National Large-scale Assessment System

This subcomponent will improve the coverage, technical quality, alignment, validity, and reliability of the national assessment system. It will promote the assessment of nationally-representative samples of student cohorts in primary and lower secondary schools to complement the current assessments in upper secondary schools. This component will support: (i) integration of curricula and assessment; (ii) closer alignment of assessment with learning goals; (iii) training for educators and administrators at various levels of the system to design and implement assessments and analyze and report the results; and (iv) creation of specialized expertise within MOET about continuously improving large-scale assessment capacity. At the same time, this component will include institutional capacity building for the assessment regime to strengthen high-quality measurement and use of data on learning outcomes as a routine feature of Vietnam's education system.

# **2.2.3.3.** Subcomponent **3.3:** Promotion of Research Capacity and Research for Continuous Improvement of Curriculum and Policy.

The educational elements in a curriculum require continuous review and, in many cases, adjustment. The process of continuous improvement enhances the effectiveness of the curriculum and promotes more and better learning. Goals for reading and literacy skills, and learning outcomes for early readers, for instance, should be reviewed and perfected on an on-going basis. Research advances various domains related to education need to be understood, and, where relevant, appropriately incorporated into the pedagogy or learning outcomes standards. While formal revision of the curriculum and its Learning Outcome Standards usually takes place about once every ten years, review of the curriculum in light of emerging research is an on-going process. This subcomponent will sponsor research programs in the areas related to the new curriculum and the Learning Outcome Standards. This research will be carried out by a National Curriculum and Assessment Center, which is expected to continue to function after the Project ends.

- National Curriculum and Assessment Center (NCAC) Research Work Programs. The center will be staffed by full-time staff and individuals second from agencies such as the Vietnam Institute of Educational Science (VNIES) and GDETA. It will also house "visiting researchers" from the university sector. The purpose of the NCAC will be to advance research in \_\_\_\_\_ areas related to curriculum, assessment, learning, and the educational policies that affect these.
- National Center for Foreign Language Learning (NCFLL). Improved foreign language skills have been identified as a national priority. This NCFLL will be become a leading center for research and training aimed at improving the teaching and learning of foreign languages in first through twelfth grade.

## 2.2.4 Component 4: Project Management (\$5M)

This component will support all aspects of project management in both the planning and implementation phases. Examples of activities financed under this component are project monitoring and evaluation and the translation of existing curricula and textbooks.

## 2.3 Project target area:

Nationwide as The Project shall assist the renovation of the general education curriculum and textbooks that affects on Vietnam's system of education consisting of schools, teachers, officers and school-age children on all regions of Vietnam.

Location of construction/improvement: To this time, locations of the centers in component 3 that shall be constructed/improved have not been identified. The main biophysical conditions, sensitive areas nearby of these locations shall be described in detail in later environmental reports when the locations are identified to support screening and assessment processes.

## 2.4 Project management and personnel

Name of Project: **RENOVATION OF GENERAL EDUCATION PROJECT** Name of Donor: The World Bank (WB) / International Development Agency (IDA) Line Agency: Ministry of Education and Training (MOET)

a) Contact Address: 49 Đại Cồ Việt street, Hai Bà Trưng District, Hanoi

b) Phone: +84-4-8691414 Fax: +84-4-8694085

## Project Owner: Ministry of Education and Training (MOET)

Project duration: 5 years: July 31, 2015 to July 31, 2020

Type of ODA: ODA concessional loan - IDA Credit

A Project Management Unit (PMU) shall be established to coordinate the overall project and implement its activities. The PMU will be headed by a Projector Director appointed by the Minister of MOET

## III. Policy, Legal, and Administrative Framework

## 3.1 Applicable National Laws and Regulations

The following Vietnamese laws, decrees and standards are applicable to the Project:

## Laws

- Environment Protection Law 55/2014/QH13 passed by the National Assembly dated June 23, 2014 regulating responsibilities of individuals and organizations regarding environmental protection.
- The Law on Water resources No. 17/2012/QH13 passed by the National Assembly dated June 21, 2012
- The Law on traffic and transportation No. 23/2008/QH12
- The Law on construction No. 50/2014/QH13 passed by the National Assembly dated June 18, 2014
- Law on Cultural Heritage (2001)
- Law on Cultural Heritage (2009) for supplementary and reformation

## Decrees and Circulars

- Decree No. 29/2011/NĐ-CP dated 18 April 2011 regarding regulations on strategic environmental assessment, environmental impacts assessment and environmental protection commitments
- Decree No. 73/2010/ND-CP on administrative penalization security and society issues
- Decree No. 59/2007/ND-CP on management of solid waste
- Decree of Government No. 149/2004/ND-CP on the permits for water resource exploration, exploitation and use, or for discharge of wastewater into water source
- Decree No. 1338/2007/NĐ-CP on technical guidelines for construction within weak foundation area
- Decree No. 22/2010/TT-BXD on regulation of construction safety;

- Decree No. 98/2010/ND-CP for supplementary and reformation
- Circular No. 26/2011/TT-BTNMT dated 18 July 2011 detailing some articles of Decree no. 29/2011/ND-CP dated 18 April 2011 regarding regulations on strategic environmental assessment, environmental impacts assessment and environmental protection commitments
- Circular No.12/2006/TT-BTNMT on Regulations on Companies engaging in Hazardous Waste Generation, Transportation and Disposal
- Circular No.12/2011/TT-BTNMT on Hazardous waste management
- Circular No.02/2005/TT-BTNMT on guiding the implementation of the Government Decree 149/2004/ND-CP on the permits for water resource exploration, exploitation and use, or for discharge of wastewater into water source
- Decision 35/2010/QĐ-UBND on the permits for water resource exploration, exploitation and use, or for discharge of wastewater into water source within the area of Hanoi
- Decision No.23/2006/QD-BTNMT on the List of Hazardous Waste
- Decision No. 3733/2002/QD-BYT on application of 21 standards on safety and health.
- Instruction No. 02 /2008/CT-BXD on safety and sanitation issues in construction agencies

Among the above legislations, the Decree No. 29/2011/ND-CP details some regulations that the project has to directly cross-reference as discussed below:

- Annex II lists the projects that requires EIA be prepared.
- Annex III lists the projects of which EIAs are subjected to MONRE appraisal and approval. Below are most relevant to the proposed projects:
- ✓ Projects that use land of national park, natural reserve, world heritage, national historical/ cultural/landscape, biosphere conservation sites, except those using less than 20 ha of land in the buffer of biosphere conservation sites;
- ✓ Projects that require conversion of watershed protection forests, waves/wind/sand blowing protection forests, from 20 ha of specialized forests or from 100 ha of other natural forests, from 20 ha of two crops rice field land, from 100 ha new aquaculture farms on sandy soil;
- ✓ Projects implemented in areas covering more than one province.

## Standards

- QCVN 03: 2008/BTNMT: National technical regulation on the allowable limits of heavy metals in the soils;
- TCVN 6774:2000 water quality freshwater quality guidelines for protection of aquatic life
- QCVN 05:2013/BTNMT-National technical regulations on ambient air quality;
- QCVN 26:2010/BTNMT National Technical Regulation on noise.
- QCVN 27:2010/BTNMT National Technical Regulation on vibration.

- QCVN 07: 2009/BTNMT: National technical regulation on hazardous waste thresholds
- QCVN 08: 2008/BTNMT: National technical regulation on quality of surface water
- QCVN 09:2008/BTNMT: National technical regulation on quality of groundwater
- QCVN 14: 2008/BTNMT :National technical regulation on domestic wastewater
- TCVN 5308-9: Technical regulation on safety in construction;
- TCVN 7222:2002: General requirements on waste water treatment plants;
- TCVN 4447:1987: Earth works-Codes for construction

## 3.2 World Bank Safeguard Policies Triggered

#### World Bank Safeguard Policies and Guidelines

OP 4.01: Environmental Assessment<sup>1</sup>
 The OP 4.01 is triggered as the project may cause adverse environmental and social impacts associated with the construction of 2 small/medium buildings and rehabilitation

of 4 other buildings under the component 3

- The OP 4.10 is triggered as the project will benefit indigenous peoples through an innovated education system that does not have any adverse effects on them, and they receive culturally compatible social and economic benefits
- The OP 4.12 is not triggered as there is no land acquisition as part of the civil works being financed by the project. The construction of the two new buildings will be on existing MOET's premises or those of MOET's universities which they have land ownership Public Consultation and Information Disclosure

OP4.01 requires during the EA process, that project-affected groups and local non-governmental organizations (NGOs) be consulted about the project's environmental aspects and takes their views into account. OP 4.01 further requires that such consultations are initiated as early as possible during project preparation and throughout project implementation as necessary to address EA-related issues that affect them.

As per the World Bank's Policy on Access to Information and OP4.01 all Environmental Safeguard Instruments such as ESMF, EMP and ECOP will be disclosed locally in accessible places and also at the Info-shop in Washington DC.

• The World Bank Group Environmental, Health & Safety (EHS) General Guidelines The EHS Guidelines are technical reference documents with general and industry-specific examples of Good International Industry Practice (GIIP), as defined in IFC's Performance Standard 3 on Pollution Prevention and Abatement. The EHS Guidelines contain the performance levels and measures that are normally acceptable to The World Bank Group and are generally considered to be achievable in new facilities at reasonable costs by existing technology. When host country regulations differ from the levels and measures presented in the EHS Guidelines, projects are expected to achieve whichever is more stringent. If less stringent levels or measures are appropriate in view of specific project

<sup>&</sup>lt;sup>1</sup>For more details about WB guidelines and Policies, please visit Bank websites:

http://web.worldbank.org/WBSITE/EXTERNAL/PROJECTS/EXTPOLICIES/EXTSAFEPOL/0,,menuPK:584441~pagePK:64 168427~piPK:64168435~theSitePK:584435,00.html and http://www.ifc.org/ifcext/sustainability.nsf/Content/EHSGuidelines

circumstances, a full and detailed justification for any proposed alternatives is needed as part of the site-specific environmental assessment. This justification should demonstrate that the choice for any alternate performance levels is protective of human health and the environment.

• The THE PROJECT has been screened and assigned as Category B EA in line with the World Bank's policy on environmental assessment (OP 4.01). Three safeguard policies including OP/BP 4.01 and OP/BP 4.10 are triggered.. The WB safeguard policies to be triggered by project activities are presented in table 1.

	Ç Ç
World Bank Safeguard policies	Triggered
Environmental Assessment (OP/BP 4.01)	Yes
Natural Habitats (OP/BP 4.04)	No
Forests (OP/BP 4.36)	No
Pest Management (OP 4.09)	No
Physical Culture Resources (OP/BP 4.11)	No
Indigenous Peoples (OP/BP 4.10)	Yes
Involuntary Resettlement (OP/BP 4.12)	No
Safety of Dams (OP/BP 4.37)	No
Projects on International Waters (OP/BP7.50)	No
Projects in Disputed Areas (OP/BP 7.60)	No

## Table 1. World Bank Safeguards Policies Triggered by The Project

## 3.3 Gap analysis

There are some differences between Vietnamese regulations and WB's safeguard policies for environmental screening to determine the appropriate exent and type of EA. The detail is presented in table 2.

Table 2.	The differences	between	Vietnamese	regulations	and WI	B's safeguard	nolicies
I abic 2.	I ne unierences	Detween	v icenamese	i cguiacions	and m	s saitguara	poneres

Screening process	Responsible	When
Screening is carried out according to Decree No 29/2011/ND-CP and in particular using the list of project types given in Annex II, III of this Decree - Projects listed in Annex II, III require a detailed EIA report - Projects not listed in Annex II, III require an Environmental Protection Plan (EPP)	Project proponent screens and prepares necessary EA report for investment license application MONRE or DONRE reviews and approves screening process at stage of reviewing investment license application	Project identification and before application for investment license
The WB classifies the proposed project into one of four categories depending	The Bank undertakes environmental screening of	Project identification

upon the type, , location, sensitivity, and	each proposed project to	
scale of the project and the nautre and	determine the appropriate	
magnitude of its potential environmental	exent and type of EA	
impacts.		
- Category A: An EIA is normally required		
- Category B: The scope of EA is		
narrower than that of Category A EA.		
An EMP and/or ECOP is normally		
required.		
- Category C: Beyond screening, no further EA action is required.		
The WB does not use a list of projects		
for the screening process		

To fill up the gap, The project shall be complied with both Vietnamese regulations and WB's safeguard policies that uses two screening process consisting of Decree 29/2011/ND-CP and environmental screening of the WB.

## **IV.** Potential Project Impacts and Mitigation Measures

## 4.1 Potential positive impacts

The overall positive impact of this project is to effectively assist the renovation of the general education curriculum and textbooks to contribute to the development of high quality human resources to address the requirements the country's industrialization and modernization and Vietnamese society as a whole will benefit from the development of a more educated population and stronger economy.

Contributing to the overall impact above, the construction/improvement of the buildings for research, development and language testing activities shall assist the enhancement of R&D capacity to help the development of General Education curriculum and the enhancement of applied research capacity in the areas of examination, testing and general education quality assessment.

## 4.2 Potential negative impacts

The Project will have some potential environmental and social impacts associated with the construction/improvement of small to medium-scale buildings in the component 3. These potential impacts include as below:

- When the buildings are newly constructed, land acquisition is likely to take place. This activity will cause some social impacts on local community such as loss of likelihood, shelter... Other potential social impacts on local communities will be those relating to transportation, road safety or public safety during site clearance, construction, and operation, which could be managed as suggested in this ESMF.
- Unexploded ordnance (UXO) is also a risk likely to occur as the locations for

buildings constructed by the project have not yet been identified and Vietnam has a history of war in many years as well as is ranked as the tenth country on most number of mines deployed on the territory.

• The key potential impacts during construction/rehabilitation of the buildings are anticipated including generation of noise, dust, solid waste, wastewater, and traffic and labor safety at moderate level and in short-term period. Generation of domestic wastewater and solid waste are the main, long-term impacts during the buildings operation.

The potential environmental and social impacts of the Project are expected to be localized, short-term, moderate and can be managed through good design, the implementation of construction practices as described in the Environmental Codes of Practice (ECOP) (see the detail in Annex 4) and throughout measures specified in the ESMF during Project implementation. The Project is not expected to have significant adverse environmental impacts and thus has been classified as Category B project.

## 4.3 Mitigation measures

As locations for construction/improvement of buildings are not known by now, the sitespecific impacts for subprojects are not yet known until implementation phase. Nevertheless, during implementation, the mitigation measures for generic impacts relevant to, land acquisition are described in the resettlement action plans (RAPs) as well as UXO risks, generation of dust, noise, waste water, solid waste, and traffic and labor safety in the Environmental Codes of Practice prepared during preparation phase of subprojects. These mitigations apply to construction and/or minor construction activities and shall be carried out by contractor during construction. The ECOP will be included in the bidding documents and relevant contract documents. In addition, prior to the construction/improvement execution, the PMU shall ensure to hire competent consultants to prepare and review the design for construction/improvement works. The designs for these buildings shall be approved by local competent agencies in line with the relevant legal documents.

Regarding impacts arising from operation of buildings constructed by the project such as generation of domestic solid waste and wastewater, the owners of these buildings have to be responsible for signing contracts with local services companies to collect, transport and treat the wastes arising during operation.

## V. Environmental and Social Management Framework Process

## 5.1 Safeguard Screening for Subprojects/activities<sup>2</sup>

The purpose of safeguard screening is to ensure that proposed subprojects/activities would not cause any significant adverse environmental and social impacts as well do not trigger safeguard policies other than OP/BP4.01, OP/BP 4.10 during implementation. , The safeguard screening for proposed subprojects/activities would be conducted as early as possible and considered as key steps during project implementation. For each proposed subproject/activities, PMU's environmental consultant will refer to the project proposal and

<sup>&</sup>lt;sup>2</sup> Refer to new building construction and rehabilitation activities

fill out an "ENVIRONMENTAL AND SOCIAL SAFEGUARDS CHECKLIST" as introduced in Annex 2.

## 5.1.1 Eligible subprojects/activities

The result from screening process is to determine the eligibility of proposed subprojects or activities, which would be supported under the project, and subsequently the appropriate safeguard instruments that need to be prepared for proposed subprojects or activities to manage anticipated adverse environmental and social impacts.

By design, The Project only triggers the WB safeguard policies of OP/BP 4.01 (Environment Assessment) and OP/BP 4.10 (Indigenous Peoples), so any proposed subprojects or activities during implementation trigger safeguard policies different to these three safeguard policies will not be supported under the project. In addition, the Project is classified as category B so proposed subprojects or activities which cause significant adverse environmental and social impacts like Category A will not also be supported under the project.

# 5.2 Safeguard Instruments Preparation for subprojects/activities supported under the Project

As per National Law on Environmental Protection 2014, PMU will prepare an EIA or EPP for each subproject/activity supported under the Project during implementation. in close consultation with key stakeholders especially locally-affected people. The content and format of an EIA and EPP are given in *Circular No. 26/2011/TT-BTNMT dated 18 July 2011*.

As per WB policy requirements, PMU will prepare the following safeguard instruments:

- Environmental Management Plan (EMP): An EMP consists of the set of mitigation, monitoring, and institutional measures to be taken during implementation and operation to eliminate adverse environmental and social impacts, offset them, or reduce them to acceptable levels. The plan also includes the actions needed to implement these measures. EMPs are essential elements of EA reports for Category A projects; however, for many Category B projects, the EA may result in a management plan only. To prepare a management plan, the PMU and its EA design team (a) identify the set of responses to potentially adverse impacts; (b) determine requirements for ensuring that those responses are made effectively and in a timely manner; and (c) describe the means for meeting those requirements. The content of an EMP for a Category A project is included in Annex 2;
- Resettlement Plan: The plan is based on up-to-date and reliable information about (a) the proposed investment and its associated impacts on the displaced persons and other adversely affected groups, (b) the legal issues involved in resettlement, and (c) mitigation measures including compensation, assistance, and resettlement supports. More detailed guidance is shown in project's RPF.

For sub-project which an EIA or EPP has already been approved by GoV authorities, the PMU's environmental consultant will make a due diligence to assess the adequacy of these reports. If any insufficiency is identified, the subproject owner will have to prepare one EMP

with supplementary measures, subjected to PMU prior review and approval. Depending on the investment type and scope, a subproject requiring EPP as per government requirements may need to prepare an EMP including ECOP to satisfy the World Bank safeguards policy.

## 5.3 Review, Approval, and Disclosure of Subproject Safeguards Instruments

## 5.3.1 Review and approval of safeguards instruments

**Government's review and approval**: If a subproject requires review and approval according to the government EA regulation, the PMU will prepare and submit the EA report as required for review and secure the approval by relevant government authorities before subproject appraisal. The guidelines on appraisal and approval of an EIA or EPP are included in the respective government regulation (namely, Decree 29/2011/NĐ-CP dated 18 April 2011 regarding regulations on strategic environmental assessment, environmental impacts assessment and environmental protection commitments, and Circular 26/2011/TT-BTNMT dated 18 July 2011 detailing some articles of Decree 29/2011/NĐ-CP). The letter of approval will be provided to the World Bank for information.

**World Bank review and clearance:** The procedures for the World Bank's safeguards review and clearance of subprojects prepared during implementation are described in the following table.

Steps	Environmental Action Required	Implemented by	<b>Review/Approval</b>
1. Identification	1.1. Prepare basic information and submit to PMU for screening	Technical design consultant	PMU
	1.2. Environmental eligible screening: screening to exclude proposed subprojects/activities triggering Bank safeguard policies other than OP/BP 4.01, OP/BP4.10 and submit to WB for review	PMU	WB
	1.3. Screen to determine the appropriate extent and type of EA, i.e. EIA, EMP/ECOP, or EPP. For Category C, beyond screening, no further EA action is required.	PMU	WB
2. Preparation	2.1. Prepare EIA, EMP including ECOP, and EPP and RP (if any) in close consultation with with key stakeholders and submit to relevant agencies for review and approval	PMU	EMP/ECOP/RP reviewed and approved by WB EIA/EPP reviewed and approved by DONRE/District People Committee
3. Bidding	3.1. Include ECOP in bidding document and civil contract	PMU	WB
4. Construction	Implement mitigation measures of subprojects	Contractors	PMU

Table 3. Summarization of environmental management procedures

Prepare periodic monitoring reports on safeguard compliance and environmental quality monitoring of subprojects	CSC Environmental consultant	PMU
Report on project safeguards compliance to WB	PMU	WB

## 5.3.2 Public consultation and Information Disclosure

## **Public Consultation**

During EA process, PMU will conduct public consultation with key stakeholders especially locally-affected people and local NGOs to take their views into account. The public consultation is to ensure that potential affected people to understand subproject/activity potential impacts and their concerns will be adequately addressed by mitigation measures during subproject design, implementation and operation.

At the consultation, representatives from affected groups will be informed about the project's potential environmental impacts and mitigation proposed to mitigate these impacts. Representatives from affected people will be asked to comment on the impacts/mitigation measures or talk about their socio-environmental concerns related to project activities. The public consultation activities - including date, location, and publication form, comment from consulted people and response from PMU - shall be documented and taken into account into finalization of EIA/EMP/EPP report.

## **Disclosure EA documents**

For meaningful consultations, the PMU provides relevant material including project paper and draft EA reports in Vietnamese language in a timely manner prior to consultation to the groups being consulted.

In addition, a full package including EIA, EPP, EMP, environmental certificates, records of public consultations will be disclosed locally at MOET's website and subproject sites prior to appraisal of subprojects

Typical safeguard screening to be taken during project implementation is illustrated in the flow chart figure 1.

## Figure 1. Schematic Flowchart for Safeguard Screening for proposed subprojects/activities



## 5.4 Implementation, Supervision, Monitoring, and Reporting

A central project management unit (PMU) assigned by the project implementing agency (MOET) is asked to take the lead in overseeing and monitoring of the implementation of subprojects and this unit will periodically supervise and monitor the safeguard implementation performance and include the progress/results in the Project Progress Report.

The PMU will hire an Environmental specialist as Consultant responsible for effective and timely implementation of safeguard activities to be responsible for managing and monitoring of the environmental and social impacts of subprojects throughout the project period. The main responsibilities of the environmental specialist will include, but not be limited to (a) enforcing compliance, including supervision and monitoring, of all environment and social aspects; (b) representing the subproject owner for all matters related to the project safeguards; and (c) responsibility for overall coordination of subproject EMP implementation. Information regarding the safeguard measures and performance should be periodically disclosed to the public.

During subproject/activity implementation, the mitigation measures outlined in EIA/EMP/EPP should be monitored to ensure that they are implemented in a timely and adequately manner. In some cases, it is necessary to take additional measures to ensure that all arising impacts are adequately addressed.

During subproject implementation, construction supervision consultant (CSC) (if any) will be responsible for day to day supervision of mitigation compliance and monitoring activities which have been identified in EMP/ECOP. Local communities are encouraged to undertake monitoring. If there are complaints from local project-affected groups, PMU should be prepared to send staffs in a timely fashion to assess the validity of complaints and take any necessary actions to remedy the situation. Reporting on the implementation of the EMP should be sent to the PMU as part of the progress reports.

The PMU environmental staff/consultant will monitor the environmental and social safeguard compliance of subprojects on periodic basis as committed in the EA documents. Generally, it will be at least twice per year for environmental monitoring activities. The monitoring shall be conducted during construction/improvement phase

PMU is responsible to provide technical guidance if necessary to CSC to enable them fulfill their supervision responsibilities and related reporting and documentation requirements.

## VI. Implementation Arrangement

## 6.1 Responsibility for ESMF Implementation

A Project Management Unit (PMU) shall be established to coordinate the overall project and implement its activities. The PMU will be headed by a Projector Director appointed by the Minister of MOET.

MOET and its corresponding project PMU will have overall responsibility for safeguard implementation including providing guidance, requirements and carrying out environmental monitoring to ensure the subproject owners to adequately implement the safeguard requirements. In addition, the PMU assisted with CSC and Environmental consultant will be responsible for ensuring safeguard compliance relating to the civil works. The responsibility of stakeholders for ESMF implementation is described in the table 4.

No	Organizations	Responsibilities
1	PMU under MOET,	- Responsible for overall coordination of Project implementation including safeguard execution.
		- Provide training and technical assistance as necessary to strengthen capacity for CSC, Contractors
		- Update the ESMF as necessary, taking into account the lesson learnt during Project implementation.
		- Allocate qualified staff /consultant responsible for ensuring social and environmental compliance during the construction/improvement phase and the first year of operation. The role of staff/consultant but not limited to the following:
		• Screening the eligibility of the locations for buildings constructed/improved
		• Preparation and get approval of necessary environmental assessment report for the construction/improvement of building according to Vietnamese legislations and WB requirements
		• Provide safeguard training courses to CSC, contractors if necessary.
		• Monitoring to ensure the environmental safeguard compliance as specified in relevant documents during the design, construction and 1 <sup>st</sup> year operation
		• Monitoring the implementation of environment and safety compliance by CSC/contractor during implementation and during 1 <sup>st</sup> year of operation
		• Report on implementation including environmental compliance to WB for review.
2	Environmental Consultant (EC)	The EC is responsible for monitoring the implementation of the World Bank's environmental safeguard policies in all stages and process of the project. Specifically, the EC will be responsible for: (i) screening subprojects against eligibility criteria, for environment and social impacts, policies triggered and instrument/s to be prepared;(ii) preparing/reviewing the subproject EIAs/EPPs and EMPs prepared by consultants to
		ensure quality of the documents; (iii) helping PMU incorporate EMPs into the detailed technical designs and civil works
		bidding and contractual documents; (iv) helping PMU incorporate responsibilities for EMP monitoring and
		supervision into the TORs, bidding and contractual documents

#### Table 4: Institutional arrangement for ESMF implementation

No	Organizations	Responsibilities
		for CSC and IEMC; v) providing relevant inputs to the consultant selection process; (v) reviewing reports submitted by the CSC; (vi) conducting periodic site checks; (vii) advising the PMU on solutions to environmental issues of the project; and viii) preparing environmental performance section on the progress and review reports to be submitted to the MOET and the World Bank
3	Civil Contractors	Carry out mitigation measures and self-monitoring of health and safety
4	Construction Supervision Consultant (CSC)	<ul> <li>The CSC will be responsible for routine supervising and monitoring all construction activities and for ensuring that Contractors comply with the requirements of the contracts and the EMP.</li> <li>The CSC will also assist the PMU in reporting and maintaining close coordination with the local community.</li> </ul>
3	Operator of the buildings	Carry out mitigation measures and ensuring environmental compliance during operation phase of buildings
4	Local authorities including DONRE, District People Committee	Review and approve Environmental Report (EIA/EPP) and carry out environmental monitoring as mandated by the GoV regulations
5	Local community, Social organizations, NGOs and civil society groups	<ul> <li>Community: According to Vietnamese practice, the community has the right and responsibility to routinely monitor environmental performance during construction to ensure that their rights and safety are adequately protected and that the mitigation measures are effectively implemented by contractors and the PMU. If unexpected problems occur, they will report to the CSC/PMU.</li> <li>Other organizations could be a bridge between the PPC/DPC, communities, contractors, and the PMU/PPMU by assisting in community monitoring.</li> <li>Mobilizing communities' participation in the subproject, providing training to communities.</li> <li>Participating in solving environmental problems, if any.</li> </ul>

## **6.2 Reporting Arrangements**

The safeguard performance will be included in subproject and project progress reports. The PMU, with assistance from the EC; CSC, will will prepare a safeguard performance report at least twice per year to be included in the progress report describing the project compliance with the ESMF and other safeguard requirements, including the results of new subproject screening and safeguards documentation

In order to exchange information effectively, establish a database for monitoring the implementation of mitigation measures, and create an effective implementation of EMP, it is

essential to adopt a system of standard report at all levels of management as shown in the figure below.



Figure 2. System of environmental and safety reports

VII. Capacity Building, Training, and Technical Assistance

This section of the ESMF describes the capacity building, training, and technical assistance included in the project to ensure effective implementation of the ESMF

## 7.1 Institutional Capacity Assessment

The World Bank has funded many education projects since the 1990s, and MOET have carried out WB funded projects and therefore have experience of the World Bank's safeguard policies. However, in the stage of appraisal, the PMU has been established yet as well as the PMU's officers also have been mobilized. It is difficult at this time to assess exactly the capacity of the PMU in safeguard aspects, but with main background in education field, the PMU and its officers are unlikely to have adequate environmental knowledge for implementation of environmental management procedures.

The Project will require the allocation of qualified an environmental consultant (EC) under PMU to oversee environment and social safeguard issues and necessary training will be

carried out to strengthen capacity of PMU, CSC, Contractors... in implementing safeguard requirements

## 7.2 Training

Based on actual demands in project implementation, a capacity building and training program for relevant agencies is established as shown in the table below:

Training content	Trainee	Number of trainees	Training time	Organization unit	Budget
Leaning on labor safety and environmental sanitation	Contractor's workers and technical staff	All workers and staff on site	Prior to construction /improvement and following legal regulations	Contractor in coordination with Institute of Labor, War invalids and Social Affairs	A part of construction/ improvement contract
Training on of environmental compliance and monitoring	PMU's officers, Contractor CSC's staff in charge of environmental sanitation	3-4 trainees	Prior to construction	PMU in coordination with Environmental Consultant	A part of environmenta l consultant contract

Table 5 Proposed programs on capacity building on environmental management

## VIII. ESMF Implementation Budget

The Contractor must ensure the implementation of relevant mitigation measures as described in the ECOPs (see Annex 5) of abiding with the following four HSET criteria: Health for Community (Health); Site Safety (Safety); Environmental Sanitation (Environment) and Transport Management (Transportation).

The cost for organization, training, dissemination, procurement, operation of equipment, and manpower for implementation of mitigation measures in and out of the site in accordance with HSET requirements are integrated in the cost for construction/improvement package. Contractors will be responsible to study, prepare alternatives and estimate cost for these activities. It is considered as one of the criteria for assessing the capability of the Contractor in the future and compliance level of the Contractor.

In case of violations, the Client can impose penalties or hire another unit to participate in solving arising problems.

## • Cost for Environmental Supervision Carried Out by CSC

The CSC will be responsible for proposing organization and monitoring plans on the Contractor's compliance with mitigation measures. In addition, CSC will be required to assign staffs and prepare detailed working plans in order to monitor environmental sanitation and labor safety management on and around the site. The cost for this assignment will be proposed in the contract with CSC.

## • Cost for Environmental Consultant (EC)

The PMU shall sign a contract with an Environmental Consultant for the implementation of whole project. The consultant shall implement assignments of all project components focusing on component 3 with the construction/improvement of buildings. The estimation cost for the Environmental Consultant is presented in the table 7 cost for ESMF.

Who	Description of task	Time	Unit cost	Total (USD)
Environmental consultant	- Capacity building related to safeguard compliance for CSC, PMU's officers, contractors	3 year	10000/each year	30,000
	- Carry out environmental management for subprojects under Component 3			
	+ Environmental screening			
	+ Prepare/Review the EIA/EPP/EMP			
	+ Monitoring safeguard compliance during the civil works			
	+ Assist PMU to prepare semi-annual reports that are sent to the World Bank			
CSC	Carry out supervision/monitoring on civil works (including EHS and construction quality) on daily basis CSC	During construction	Including in the contract	As part of CSC contract
Contractors	Carry out mitigation measures and do self- monitoring health and safety issues mentioned in EIA/EMP/ECOP/EPP	During Construction/ improvement	Including in the contract	As part of construction contract

 Table 6. Cost estimation for ESMF

**Note:** The above cost rate is estimated based on current unit price and environmental specialist's experiences. Because the project will be implemented over many years, price fluctuation will be unavoidable. A contingency amount should be prepared for any unavoidable price or cost increase during project implementation

## IX. Grievance Redress Mechanism

A grievance redress and resolution mechanism to address grievances and complaints related to EMP implementation and the project in general. This is shown in Figure 2. Every attempt should be made to establish a rapport between the affected communities and the implementing agencies through frequent interactions and transparency thereby maximizing the resolution of grievances at commune level. A three-stage procedure for redress of grievances is proposed based on practice as follows:

- **Stage 1:** Complaints from affected people on any environmental damage caused by the project implementation will be lodged verbally or in written form by the affected people. The staff from Ward/Commune/Commune Supervision Board will assess the level of environmental damage and report to the PMU within 15 days of the receipt of the complaint.
- Stage 2: If no resolution can be reached or if no response is received from the liaison officer within 15 days of registering the complaint, the affected people can take their complaint to the District People Committee who will conduct a site investigation to assess the damage and discuss with a contractor during the construction stage to determine and immediately take the appropriate remedial measures within 30 days of the receipt of the complaint.
- Stage 3: If the affected people are not satisfied with the decision of City/Province People Committee or in the absence of any response, the affected people can

appeal to the DONRE or City or Provincial People's Committee (C or PPC). The DONRE/C or PPC will provide a decision on the appeal within 45 days but not exceeding 60 days<sup>3</sup>, from the day it is received by the C or PPC. In this stage, DONRE/C or PPC will enforce the PMU to take the strong corrective action to resolve the problems either though enforcement of contractor's duties under the signed contract or providing necessary additional actions under its overall duties of project implementation.

A complaint or a case in the Court of Law may be filed separately or independently from the Project level Grievance Redress mechanism filing process. Implementers of the mechanism should be guided by appropriate government decrees related to complaints such as: Law on Complaints No. 02/2011/QH13; Article 64 of Government Decree 84/2007/ND-CP; Clause 2, Article 40 of Decree 69/2009; and regulation on grievance at Government Decree 75/2012/ND-CP dated 20/11/2012.

<sup>&</sup>lt;sup>3</sup>Law on Complaints, Article 28, Law No. 02/2011/QH13 dated November 11, 2011



Figure 3. Grievance Redress Mechanism

## X. ESMF Consultation and Disclosure

The content of ESMF has been consulted with MOET and The details is presented as follow

Table 7. Public consultation and disclosure of the ESMFObjective	Participants	Time	Consultation results
Lonn Objective			

The first round			
Dissemination of the content of the first draft ESMF	Mr Ngo Kim Khoi	10h30 24 <sup>th</sup> Oct 2014	Understanding and Agreement of the content
	Director of Secondary Education		
	Mr <b>Doan Van</b> Ninh – Deputy Director of Secondary Education, Director of Standing unit		
	Mr <b>Ta Ngoc</b> Tri		
	Member of Standing unit		
The second round			
Discussion about the content final draft ESMF	Mr <b>Doan Van</b> <b>Ninh</b> Director of Standing unit	11h 29 <sup>th</sup> Oct 2014	Agreement of the content. An official letter on agreement of the ESMF is issued

Due to the locations of construction and improvement activities have not been identified, the groups affected by the project activities are unlikely to identify as well as consult at this moment. The impacts by construction/improvement and mitigation measures shall be consulted with affected groups during preparation of EIA/EMP/EPP for subprojects/activities.

At Project level, the final draft ESMF has been disclosed locally in Vietnamese language through MOET's website and project sites and in Vietnam Development Center (VDIC) in 11/2014. This framework in English shall also be disclosed in the Bank's InfoShop prior to appraisal.

## XI. ANNEXES

## Annex 1. Official letter for agreement of ESMF's content issued by MOET

Bộ GIÁO DỤC VÀ ĐÀO TẠO **BỘ PHẬN THƯỜNG TRỰC** V/v: Góp ý kiến Khung quản lí môi trường xã hội Dự án RGEP Hà Nội, ngày 29 tháng 10 năm 2014 **Kính gửi:** Lãnh đạo Bộ Giáo dục và Đào tạo Ngày 22 tháng 10 năm 2014 Bộ phận thường trực nhận được Bản thảo ''Khung quản lí môi trường và xã hội'' của dự án RGEP. Sau khi tìm hiểu nghiên cứu và phân tích Bộ phận thường trực thấy rằng Bản thảo này đầy đủ, phù hợp với yêu cầu hiện nay. Bộ phận thường trực trân trọng đề nghị Lãnh đạo Bộ Giáo dục và Đào tạo cho phép Tổ

công tác chuẩn bị Dự án hoàn thiện Bản thảo và tiến hành các thủ tục cần thiết theo qui định.

Xin trân trọng cảm ơn!

Noi nhận: - Như trên (thực hiện); - Lưu: VT, BPTTr. TRƯỞNG BỘ PHẬN THƯỜNG TRỰC

Sleall

PHÓ VU TRƯỜNG VỤ GĐ TRUNG HỘC in Tim Shad

# Annex 2. ENVIRONMENTAL AND SOCIAL SAFEGUARDS CHECKLIST

This subproject screening checklist is intended for the use of PMU so that they can determine the appropriate type of safeguards documentation that will be required by the World Bank for the subproject, in conformance with the ESMF for the Project.

The PMU is encouraged to send this checklist to the Task Team Leader (TTL) to ensure that the World Bank agrees with the results of the screening prior to the Borrower's hiring of consultants to prepare safeguard documents.

#### NAME OF PROJECT

Subproject Name:

Subproject Location: (e.g. region, district, etc.) Type of activity: (e.g. new construction, rehabilitation, periodic maintenance) Subproject Owner and Address: Environmental Category of the Main Project: (e.g., A or B)

#### **Eligibility Screening**

Eligibility screening is conducted to determine if a subproject is eligible for funding under the project. To avoid significant adverse environmental and social impacts, some projects may include criteria for ineligibility or have an ineligible activity list to screen out subprojects. These criteria or the ineligible list are included in the ESMF and during the project implementation subprojects are screened against these criteria.

In addition, there are certain types of projects that the World Bank does not fund at all (consult the World Banksafeguards policies).Please note that the owner of the subproject is expected to comply with all national legislation and standards and with obligations (standards, restrictions or similar) of the country under international conventions, treaties, agreements and protocols.

#### 2. Technical Environmental Screening

The technical environmental screening of each proposed subproject is to determine the appropriate extent and type of EA. The outcome of this screening is used to classify the subprojects into one of three categories, depending on the type, location, sensitivity, and scale of the subproject and the nature and magnitude of its potential environmental impacts (OP 4.01, paragraph 8).

(a) Category A: A proposed project is classified as Category A if it is likely to have significant adverse environmental impacts that are sensitive, diverse, or unprecedented. These impacts may affect an area broader than the sites or facilities subject to physical works.

- (b) Category B: A proposed project is classified as Category B if its potential adverse environmental impacts on human populations or environmentally important areas - including wetlands, forests, grasslands, and other natural habitats - are less adverse than those of Category A projects. These impacts are site-specific; few if any of them are irreversible; and in most cases mitigatory measures can be designed more readily than for Category A projects.
- (c) Category C: A proposed project is classified as Category C if it is likely to have minimal or no adverse environmental impacts. Beyond screening, no further EA action is required for a Category C project.

## 2.1 Category A Screening Criteria

The following set of screening questions is intended to determine if the subproject has the potential to cause significant adverse impacts (i.e., is the subproject a Category A).

Table 8.Category A Screening Criteria							
Screening Questions	Yes	No	Remarks				
1. Does the subproject have the potential to critical natural habitats?	cause	e signi	ficant adverse impacts to natural or				
Leads to loss or degradation of sensitive Natural Habitats defined as: land and water areas where (i) the ecosystems' bio-logical communities are formed largely by native plant and animal species, and (ii) human activity has not essentially modified the area's primary ecological functions. Important natural habitats may occur in tropical humid, dry, and cloud forests; temperate and boreal forests; Mediterranean-type shrub lands; natural arid and semi-arid lands; mangrove swamps, coastal marshes, and other wetlands; estuaries; sea grass beds; coral reefs; freshwater lakes and rivers; alpine and sub alpine environments, including herb fields, grasslands, and paramos; and tropical and temperate grasslands.			Indicate location and type of natural habitat and the kind of impacts that could occur, e.g., loss of habitat and how much, loss of ecosystem services, effects on the quality of the habitat. State why these impacts are or are not significant. Note that the World Bank does not support projects involving the significant conversion of natural habitats unless there are no feasible alternatives for the project and its siting, and comprehensive analysis demonstrates that overall benefits from the project substantially outweigh the environmental costs.				
Leads to loss or degradation of Critical natural habitat, i.e., habitat that is legally protected, officially proposed for protection, or unprotected but of known high conservation value. Critical habitats include existing protected areas and areas officially proposed by governments as protected areas (e.g., reserves that meet the criteria of the World Conservation Union [IUCN] classifications, areas initially recognized as protected by traditional local communities (e.g., sacred groves), and sites that maintain conditions			Note that the World Bank cannot fund any projects that result in significant conversion or degradation of critical natural habitats. Indicate location and type of critical natural habitat and state why they are or are not significant.				

vital for the viability of these protected areas. Sites may include areas with known high suitability for bio-diversity conservation; and sites that are critical for rare, vulnerable, migratory, or endangered species.	
2. Does the subproject have the potential t cultural resources?	o cause significant adverse impacts to physical
Leads to loss or degradation of physical cultural resources, defined as movable or immovable objects, sites, structures, groups of structures, and natural features and landscapes that have archaeological, paleontological, historical, architectural, religious, aesthetic, or other cultural significance. They may be located in urban or rural settings, above or below ground, or under water. Their cultural interest may be at the local, provincial or national level, or within the international community.	Describe location and type of cultural resources and the kind of impacts that could occur. State the level of protection (local, provincial, national or international).Are any of these sites considered important to preserve in situ, meaning that the resources should not be removed from their current location? State why impacts are or are not significant.
Potentially results in a contravention of national legislation, or national obligations under relevant international environmental treaties and agreements, including the UNESCO World Heritage Convention or affect sites with known and important tourism or scientific interest.	Describe any impacts that might contravene national or international legislation concerning cultural resources. If considered not significant, explain why.
3. Does the subproject have the potential to and related natural resources used by eth	o cause significant adverse impacts on the lands nic minorities?
Potentially result in impacts on lands or territories that are traditionally owned, or customarily used or occupied, and where access to natural resources is vital to the sustainability of cultures and livelihoods of minority peoples. Potentially impact the cultural and spiritual values attributed to such lands and resources or impact natural resources management and the long-term sustainability of the affected resources.	Describe the type and extent of impacts and the significance of alterations to the resources of the affected minorities. Note that an Ethnic Minority Development Plan will also be required in accordance with World Bank OP 4.10.
4. Does the subproject have the potential to subject to physical displacement?	cause significant adverse effects to populations
Leads to physical displacement of populations dependent upon lands or use of specific use of resources that would be difficult to replace or restore? Otherwise lead to difficult issues in the ability of the subproject to restore livelihoods?	Indicate the numbers of households affected and the resources that will be difficult to replace in order to achieve livelihood restoration. Note that a Resettlement Action Plan will need to be prepared in accordance with World Bank OP

			2	4.12.
5.	Does the subproject entail the construction	n of a	large da	am?
Do dar	es the subproject require construction of a n that is:		]	Describe the issues and note the requirements of OP 4.37 concerning
•	<ul> <li>15 meters or more in height</li> <li>between 10 and 15 meters in height with special design complexitiesfor example, an unusually large flood-handling requirement, location in a zone of high seismicity, foundations that are complex and difficult to prepare, or retention of toxic materials.</li> <li>under 10 meters in height but expected to become large dams during the operation of the subproject?</li> </ul>			the appointment of an Independent Panel of Experts.
Do the	es the operation of the subproject rely on performance of: an existing dam or a dam under construction (DUC);			If yes, this may not always mean that a Category A EIA is required, but special care must be taken, because the World Bank has specific requirements to ensure the safety of
•	power stations or water supply systems that draw directly from a reservoir controlled by an existing dam or a DUC;		1	the performance of the existing dam or dam under construction. World Bank requires inspection and
•	diversion dams or hydraulic structures downstream from an existing dam or a DUC, where failure of the upstream dam could cause extensive damage to or failure of the new World Bank-financed structure and irrigation or water supply projects that will depend on the storage and operation of an existing dam or a DUC for their supply of water and could not function if the dam failed.			evaluation of dam or DUC, its performance and operation and maintenance procedures, and recommendations for any remedial work or safety-related measures; previous assessments can also evaluated.
6.	Does the subproject entail the procureme	nt or u	ise of pe	esticides?
Do Wo or II?	the formulations of the products fall in orld Health Organization classes IA and IB, are there formulations of products in Class			If yes, this may not always mean that a Category A EIA is required, but special care must be taken. The World Bank will not finance such products, if (a) the country lacks restrictions on their distribution and use; or (b) they are likely to be used by, or be accessible to, lay personnel, farmers, or others without training, equipment, and facilities to handle, store, and apply these products properly.
7.	Does the subproject have the potential to	) cause	e irreve	rsible impacts or impacts that are

not easily mitigated?	
Leads to loss of aquifer recharge areas, affects the quality of water storage and catchments responsible for potable water supply to major population centers.	Name the water bodies affected and describe magnitude of impacts.
Leads to any impacts such that the duration of the impacts is relatively permanent, affects an extensive geographic area or impacts have a high intensity.	Describe any impacts considered to be permanent, affecting a large geographic area (define) and high intensity impacts.
8. Does the subproject have the potential to impacts?	result in a broad diversity of significant adverse
Multiple sites in different locations affected each of which could cause significant losses of habitat, resources, land or deterioration of the quality of resources.	Identify and describe all affected locations.
Potential, significant adverse impacts likely to extend beyond the sites or facilities for the physical works.	Identify and describe the types of impacts extending beyond the sites or facilities of the physical works.
Transboundary impacts (other than minor alterations to an ongoing waterway activity).	Describe the magnitude of the transboundary impacts.
Need for new access roads, tunnels, canals, power transmission corridors, pipelines, or borrow and disposal areas in currently undeveloped areas.	Describe all activities that are new that are required for the main activity to function.
Interruption of migratory patterns of wildlife, animal herds or pastoralists, nomads or semi- nomads.	Describe how migrations of people and animals are affected.
9. Is the subproject unprecedented?	
Unprecedented at the national level?	Describe why and what aspects are unprecedented.
Unprecedented at the provincial level?	Describe why and what aspects are unprecedented.
10. Is the project highly contentious and lis society nationally or internationally?	kely to attract the attention of NGOs or civil
Considered risky or likely to have highly controversial aspects.	Describe perceived risks and controversial aspects
Likely to lead to protests or people wanting to demonstrate or prevent its construction.	Describe the reasons that subproject is highly unwelcome.

If the answer is yes to any of the above screening questions, the subproject is likely to be considered a Category A and an EIA meeting World Bank standards, including an EMP, will be required. The PMU is advised to discuss the results of this screening with the TTL, before starting environmental and social studies of the subproject. There are some differences in the World Bank and the government requirements for a World Bank category A project in terms

of preparation of TORs, consultation, content and structures of the EIA report. Two separate EIAs to satisfy the World Bank and the government requirements will be needed.

Note: If the main project has not been categorized as a Category A, then any subproject where the answer is "yes" to the screening questions cannot be done.

#### 2.2.Category C Screening Criteria

The following set of screening questions is intended to determine if the subproject has the potential to cause minimal or no adverse impacts (i.e., is a Category C).

Tal	Table 9.Category C Screening Criteria								
Sci	reening Questions	А.	Y	Ν	Remarks				
1.	Subproject activities are limited to training, technical assistance and capacity building.				В.	Describe activities.			
2.	Training, technical assistance and capacity building do not require use of chemicals, biological agents, pesticides.				C.	Support this statement.			
3.	There is no infrastructure to be demolished or built.				D.	Support this statement.			
4.	There are no interventions that would affect land, water, air, flora, fauna or humans.				E.	Support this statement.			
5.	If scientific research is being performed, the research is of such a nature that no hazardous or toxic wastes are created and the research does not involve recombinant DNA or other research that would create dangerous agents should they be released from contained, laboratory conditions				F.	If yes, discuss with the World Bank environmental specialists.			

## 2.3 Category B Screening

Many of the subprojects to be proposed will be Category B. They may have similar types of impacts to Category A, but the impacts are not irreversible and they are less extensive, less intensive, less adverse, more easily mitigated, not likely controversial and not unprecedented.

After the screening for Category A and Category C is applied and if the conclusion is reached that the subproject is not A and is not C, then the subproject should be categorized as B.

Category B also requires an EIA or other EA instrument in accordance with the World Bank OP 4.01. The PMU will apply the criteria of the Vietnamese regulation to determine whether to prepare an EIA or an EPP in according with the Law on Environmental Protection and associated EA Decree and Circular. In most cases, an EMP consistent with World Bank policy will be required (see Annex 4). For other case, a simplified EMP or an ECOP should suffice.

The issues that may need to be addressed in a Category B safeguards document are variable and will depend upon the type of subproject, its location and surrounding land uses and the kinds of construction and operational procedures that will be used.

## **Environmental and Social Impact Checklist**

Table 11 presents a checklist, the purpose of which is to assist the Borrower in preparing the EA instrument, including the EMP.

Table 10.Potential Environmental and Social Impacts to be Addressed								
	Does the subproject entail these environmental impacts?	No	Low	Medi um	High	Not know n	Remarks	
1.	Encroachment on historical/cultural areas							
2.	Encroachment on an ecosystem (e.g. natural habitat sensitive or protected area, national park, nature reserve etc)						Describe and briefly assess impact's level	
3.	Disfiguration of landscape and increased waste generation							
4.	Removal of vegetation cover or cutting down of trees during clearance for construction							
5.	Change of surface water quality or water flows (e.g. Increase water turbidity due to run- off, waste water from camp sites and erosion, and construction waste) or long- term.						Indicate how and when this occurs.	
6.	Increased dust level or add pollutants to the air during construction						Indicate how and when this occurs	
7.	Increased noise and/or vibration						Indicate how and when this occurs	
8.	Resettlement of households? If yes, how many households?						OP4.12 is not triggered	
9.	Use of resettlement site that is environmentally and/or culturally sensitive						Briefly describe the potential impacts	
10.	Risk of disease dissemination from construction workers to the local peoples (and vice versa)?						Note estimated number of workers to be hired for project construction in the commune/district and what kind of diseases they might introduce or acquire.	
11.	Potential for conflict between construction workers and local peoples (and vice versa)?							

12.	Use of explosive and hazardous chemicals						
13.	Use of sites where, in the past, there were accidents incurred due to landmines or explosive materials remaining from the war						
14.	Construction that could cause disturbance to the transportation, traffic routes, or waterway transport?						
15.	Construction that could cause any damage to the existing local roads, bridges or other rural infrastructures?						
16.	Soil excavation during subproject's construction so as to cause soil erosion						
17.	Need to open new, temporary or permanent, access roads?						Estimate number of and length of temporary or permanent access roads and their locations
18.	Separation or fragmentation of habitats of flora and fauna?						Describe how.
19.	Long-term impacts on air quality						
20.	Accident risks for workers and community during construction phase						
21.	Use of hazardous or toxic materials and generation of hazardous wastes						
22.	Risks to safety and human health						Describe how.
Doe	es the subproject entail land acquisitio	n or re	estriction	of acces	s to reso	urces?	
23.	Acquisition (temporarily or permanently) of land (public or private) for its development						List land areas for permanent and temporary land acquisition, type of soils, duration and purpose of acquisition
24.	Use land that is currently occupied or regularly used for productive purposes (e.g., gardening, farming, pasture, fishing locations, forests)						
25	Displacement of individuals, families or businesses						
26.	Temporary or permanent loss of crops, fruit trees or household						

	infrastructure						
27.	Involuntary restriction of access people to legally designated par and protected areas	эу ks					
	<i>If the answer to any of the questions 2 project.</i>	3-27 is "Y	Ves", plea	se consu	lt the ES	MF. OP4	1.12 is not triggered by the
G.	Are ethnic minority peoples pres	ent in the	subproj	ect area?	?		
28.	Ethnic minority groups are living within the boundaries of, or nearby, the subproject.						
29.	Members of these ethnic minority groups in the area potentially could benefit or be harmed from the project.						
	If the answer to questions 28 or 29 is Development Plan (EMDP is likely red	'Yes", ple juired.	ase consi	ult the ES	SMF; and	l prepara	tion of an Ethnic Minority
	Does the subproject entail construct	on of or a	lepend u	pon a da	ım?		
30.	Involve the construction of a large dam?					S Q	ee Table 1 for definition f a large dam.
31.	Depend on water supplied from an existing dam or weir ora dam under construction?					L r s d c	Describe the functional elationship between the ubproject and the existing lam or a dam under onstruction.
	If the answer to question 30 or 31 is "	les", plea	se consul	t the ESM	<i>AF; OP4</i>	.37 is not	t triggered by the project.
	Does the subproject entail procurement or use of pesticides?						
32.	What is the World Health Organization's classification of the formulation of the specific pesticides to be used?						See Table 1 for additional information on pesticides. To deal with this issue, one must know the types of pesticides proposed.
	If the answer to question 32 is yes, please consult the ESMF; OP4.09 is not triggered by the project.						

PMU shall submit the screening report for review regarding the categorization.

# Annex 3. Summaries of Selected Environmental and Legal Safeguard Policies

The safeguard policies are summarized briefly. The summary includes: the objectives of each safeguard policy; "triggers" for each policy; mechanisms for achieving policy objectives and consultation and disclosure requirements—for each safeguard policy and for *The World Bank Policy on* Access to *Information*. The summaries are advisory and are not intended to be a substitute for the policies and procedures which are binding. In the event of any inconsistencies between the policies/procedures and the matrix, the safeguard policies/procedures apply.

To consult the individual policies and procedures in their entirety, please go to: <u>http://web.worldbank.org/WBSITE/EXTERNAL/PROJECTS/EXTPOLICIES/EXTSAFEPOL/0,,men</u> <u>uPK:584441~pagePK:64168427~piPK:64168435~theSitePK:584435,00.html</u>

#### 1) Environmental Assessment (OP/BP 4.01)

#### **Objectives:**

To ensure that World Bank-financed projects are environmentally sound and sustainable, and that decision-making is improved through appropriate analysis of actions and of their likely environmental impacts (OP 4.01, para. 1).

#### **Triggers:**

This policy is triggered if a project is likely to have potential (adverse) environmental risks and impacts in its area of influence.

Note: OP 4.01 (para 3) states: EA takes into account the natural environment (air, water, and land); human health and safety; social aspects (involuntary resettlement, indigenous peoples, and physical cultural resources); and transboundary and global environmental aspects. EA considers natural and social aspects in an integrated way. Involuntary resettlement, indigenous peoples natural habitats, physical cultural resources, pest management, forestry, and safety of dams are also covered by separate policies with their own requirements and procedures.

#### Mechanisms for achieving policy objectives:

When OP 4.01 is triggered, the World Bank classifies the project as category A, B, C, or FI according to the nature and magnitude of potential environmental impacts (OP 4.01, para. 8). For a category A project the Borrower prepares an EA report, normally an EIA or a suitably comprehensive regional or sectoral EA (OP 4.01, para. 8a& Annex B). For category B projects, the scope of the EA may vary (OP 4.01, para. 8b) and it is narrower than that of a category A EA report.

Depending on the project and the nature of impacts, a range of instruments can be used to satisfy the World Bank's EA requirement:environmental impact assessment (EIA), regional EA, sectoral EA, and strategic environmental and social assessment (SESA), environmental audit, hazard or risk assessment, environmental management plan (EMP) and environmental and social management framework (ESMF). EA applies one or more of these instruments, or elements of them, as appropriate.When the project is likely to have sectoral or regional impacts, sectoral or regional EA is required (OP 4.01, para. 7 and Annex A).

The Borrower is responsible for carrying out the EA. For category A projects, the Borrower retains independent EA experts not affiliated with the project to carry out the EA.For category A projects that are highly risky or contentious or that involve serious and multidimensional environmental concerns, the Borrower normally engages an advisory panel of independent, internationally recognized environmental specialists to advise on all aspects of the project relevant to the EA. Note that environmental (as defined above) can include the need for social/resettlement/indigenous peoples' expertise also.

## Consultation and Disclosure Requirements (see also World Bank Policy on Access to Information)

For (i) Category A and B projects and (ii) sub-projects categorized as A and B, the Borrower consults project-affected groups and local nongovernmental organizations (NGOs) and takes their views into account.The Borrower initiates such consultations as early as possible. For Category A projects, the

Borrower consults these groups at least twice: (a) shortly after environmental screening and before the terms of reference for the EA are finalized; and (b) once a draft EA report is prepared. In addition, the Borrower consults with such groups throughout project implementation as necessary to address EA-related issues that affect them. The Borrower provides relevant information in a timely manner prior to consultation and in a form and language accessible to the groups being consulted.

For a Category A project, the Borrower provides for the initial consultation a summary of the proposed project's objectives, description, and potential impacts; for consultation after the draft EA report is prepared, the Borrower provides a summary of the EA's conclusions. In addition, for a Category A project, the Borrower makes the draft EA report available at a public place accessible to project-affected groups and local NGOs. For projects are made available in a public place accessible to affected groups and local NGOs.

Any separate Category B report for a project proposed for IDA financing is made available to projectaffected groups and local NGOs. Public availability in the borrowing country and official receipt by the World Bank of Category A reports for projects proposed for IBRD or IDA financing, and of any Category B EA report for projects proposed for IDA funding, are prerequisites to World Bank appraisal of these projects.

Once the Borrower officially transmits the Category A EA report to the World Bank, the World Bank distributes the summary (in English) to the executive directors (EDs) and makes the report available through its InfoShop. Once the Borrower officially transmits any separate Category B EA report to the World Bank, the World Bank makes it available through its InfoShop.

Separate Resettlement Plans and Indigenous Peoples Plans are disclosed with the relevant EA report. When there is no EA, it is required these reports to the InfoShop prior to appraisal.

#### 2) Forests (OP/BP 4.36)

#### **Objectives:**

The objective of this policy is to assist Borrowers to harness the potential of forests to reduce poverty in a sustainable manner, integrate forest effectively into sustainable economic development and protect the vital local and global environmental services and values of forests.

#### **Triggers:**

The policy is triggered by whenever any World Bank-financed investment project (i) has the potential to have impacts on the health and quality of forests; (i) affects the rights and welfare of people and their level of dependence upon or interaction with forests; or (iii) aims to bring about changes in the management, protection or utilization of natural forests or plantations, whether they are publicly, privately, or communally owned.

#### Mechanisms for achieving policy objectives:

Mechanisms to achieve the forest policy objectives include:

- i. use of appropriate economic, environmental and social assessments to identify the economic, environmental significance of forests and any activities involved in the World Bank-financed investment that may adversely affect the well-being of forests and the people who depend on them;
- ii. use of information required from Borrower on policy, legal and institutional framework in sector in project design to address priority poverty, social and environmental issues needed to meet the economic, environmental and social objectives of World Bank-financed investment projects.
- iii. use in project design of assessments of the adequacy of land use allocations for the management,

conservations and sustainable development of forests in forests, including identification of any additional allocations needed to protect critical forest areas.

- iv. use of clear standards for certification of forests management to guide any investment support for harvesting operations including time-bound action plans to achieve certification to acceptable standards of forest management; and
- v. use of market assessments for the full range of goods and services from well managed forests to enhance returns from forest management and give preference to small-scale, community level management approaches where they best harness the potential of forests to reduce poverty in a sustainable manner.
- vi. Furthermore, the World Bank specifically **does NOT or will conditionally finance** certain activities:
  - No projects that would involve significant conversion or degradation of critical forest areas or other natural habitats;
  - No projects that contravene applicable international environmental agreements;
  - No plantations that involve any conversion or degradation of critical natural habitats, including adjacent or downstream critical natural habitats;
  - *May* finance commercial harvesting operations or the purchase of logging equipment only when it has determined that the areas affected by harvesting are not critical forests or related critical natural habitats ;
  - Onlyfinances industrial-scale commercial harvesting operations in areas outside critical forest areas where such operations are either certified as meeting standards of responsible forest management under an independent forest certification system acceptable to the World Bank or adhere to a time-bound, phased action plan acceptable to the World Bank for achieving certification to such standards;
  - In areas outside critical forest areas, *may* finance harvesting operations by small scale landholders, local communities under community forest management or entities under joint forest management where these operations have either achieved a standard of forest management developed with the meaningful participation of locally affected communities (see paragraph 10 of OP 4.36) or adhere to a time bound action plan to achieve such a standard that has been developed with the meaningful participation of locally affected-communities and acceptable to the World Bank. All such operations must be monitored by the Borrower with the meaning participation of locally affected people;

Consultation and Disclosure Requirements (see also World Bank Policy on Access to Information):

The World Bank requires Borrowers to identify and consult the groups interested in forest areas likely to be affected by World Bank-financed invest projects in and beyond the forest sector.

The disclosure requirements as set out in the EA Policy (OP 4.01) apply to all projects affecting forests. Aside from the required EA documentation, there is no free-standing document that is automatically required for all projects affecting forests. However, many forest related projects will generate free-standing reports (such as Forest Management Plans), which should be made publicly available as a matter of good practice. Experience has shown that transparent decision-making processes are important for good forest governance and good development outcomes and full disclosure of forest-related information should be encouraged wherever feasible.

#### 3)Safety of Dams (OP 4.37)

#### **Objectives:**

**New dams**: to ensure that experienced and competent professionals design and supervise construction; the Borrower adopts and implements dam safety measures for the dam and associated works.

**Existing dams**: to ensure that any dam that can influence the performance of the project is identified, a dam safety assessment is carried out, and necessary additional dam safety measures and remedial work are implemented.

#### **Triggers:**

- Actions are triggered when the World Bank finances: construction of a large dam (15 m or higher) or a high hazard dam (see notes below) or a project dependent upon an existing dam. For a full definition of "large dam," see the World Register of Dams, published by the International Commission on Large Dams and updated periodically. 10 to 15 m high dams are considered high hazard dams if they: have special design complexities, e.g. unusually large flood handling requirements; are located in a zone of high seismicity; have foundations that are complex and difficult to prepare; or retain toxic materials.
- Dams under 10 meters in height are treated as large dams if they are expected to become large dams during the operation of the facility.
- The World Bank may finance projects that do not include a new dam but will rely on the performance of an existing dam or a dam under construction (DUC): power stations or water supply systems that draw directly from a reservoir controlled by an existing dam or a DUC; diversion dams or hydraulic structures downstream from an existing dam or a DUC, where failure of the upstream dam could cause extensive damage to or failure of the new World Bank-financed structure; and irrigation or water supply projects that will depend on the storage and operation of an existing dam or a DUC for their supply of water and could not function if the dam failed. Projects in this category also include operations that require increases in the capacity of an existing dam, or changes in the characteristics of the impounded materials, where failure of the existing dam could cause extensive damage to or failure of facilities.

#### Mechanisms to achieve policy objectives:

For small dams, generic dam safety measures designed by qualified engineers are usually adequate.

For new large dams or high hazard dams, or the rehabilitation of existing large or high hazard dams the World Bank requires:

- Reviews by an independent panel of experts throughout preparation, design, construction, and the start of operation;
- Preparation and implementation of detailed plans: a plan for construction supervision and quality assurance, an instrumentation plan, an operation and maintenance plan, and an emergency preparedness plan;
- Pre-qualification of bidders;
- A periodic safety inspection after the dam is completed.

For existing dams or DUC, the World Bank requires the Borrower to arrange for one or more independent dam specialists to:

- Inspect and evaluate the safety status of the existing dam;
- Review and evaluate the owner's operation and maintenance procedures;
- Provide a written report of findings and recommendations for any remedial work or safety-related measures.

Consultation and Disclosure Requirements (see also the World Bank Policy on Access to Information)

Although not mentioned in the policy, Emergency Preparedness Plans (EPP) require public awareness and training. Typically, projects that trigger the Dam Safety Policy will require an EA and the information from the required studies should be summarized and/or annexed to the EA.

#### 4) Pest Management (OP 4.09)

- ✓ Pest management is governed by OP 4.09 and BP 4.01 Annex C.
- ✓ The OP and BP apply to all projects involving pest management, whether or not the project finances pesticides.
- $\checkmark$  For the purpose of this summary, the term 'pest' includes disease vectors.
- ✓ The Guidebook on Pest Management provides further guidance, background, tools and references.

#### **Objectives:**

- Promote the use of biological or environmental control and reduce reliance on synthetic chemical pesticides.
- Strengthen capacity of the country's regulatory framework and institutions to promote and support safe, effective and environmentally sound pest management.

More specifically the policy aims to:

- Ascertain that pest management activities in World Bank-financed operations are based on integrated approaches and seek to reduce reliance on synthetic chemical pesticides (Integrated Pest Management (IPM) in agricultural projects and Integrated Vector Management (IVM) in public health projects).
- b) Ensure that health and environmental hazards associated with pest management, especially the use of pesticides, are minimized and can be properly managed by the user.
- c) As necessary, support policy reform and institutional capacity development to (i) enhance implementation of IPM-based pest management, and (ii) regulate and monitor the distribution and use of pesticides.

#### **Triggers:**

- Procurement of pesticides or pesticide application equipment is envisaged (either directly through the project, or indirectly through on-lending, co-financing, or government counterpart funding).
- The project may affect pest management in a way that harm could be done, even though the project is not envisaged to procure pesticides. This includes projects that may (i) lead to substantially increased pesticide use and subsequent increase in health and environmental risk, (ii) maintain or expand present pest management practices that are unsustainable, not based on an IPM approach, and /or pose significant health or environmental risks.

Mechanisms to achieve policy objectives:

- EA: Pest and pesticide management issues relevant to the project are addressed in theEA.
- Criteria for Pesticide Selection and Use are applied according to OP 4.09, para 6.
- The World Bank does not finance formulated products that fall in WHO classes IA and IB, or formulations of products in Class II, if (a) the country lacks restrictions on their distribution and use; or (b) they are likely to be used by, or be accessible to, lay personnel, farmers, or others without training, equipment, and facilities to handle, store, and apply these products properly.
- **Pest Management Plan** (PMP): A separate PMP is prepared when there are significant pest management issues, or when financing of substantial quantities of pesticides is envisaged (BP 4.01 Annex C).
- List of pesticides authorized for procurement under the project: Such a list is established prior to financing of pesticides and complies with selection criteria in OP 4.09.

#### **Consultation & Disclosure:**

Public Consultation and Disclosure requirements are those required under the EA policy (OP 4.01).

#### 5) Physical Cultural Resources (OP/BP 4.11)

#### **Definition:**

For the purposes of this policy, 'physical cultural resources' are defined as movable or immovable objects, sites, structures, groups of structures, natural features and landscapes that have archaeological, paleontological, historical, architectural, religious, aesthetic, or other cultural significance.Physical cultural resources may be located in urban or rural settings, and may be above ground, underground, or underwater. Their cultural interest may be at the local, provincial or national level, or within the international community.

#### **Objectives:**

The World Bank assists countries to avoid or mitigate adverse impacts of development projects on physical cultural resources.

#### **Triggers:**

The following projects are classified during the environmental screening process as Category A or B, and are subject to the provisions of this policy: (a) any project involving significant excavations, demolition, movement of earth, flooding, or other environmental changes; (b) any project located in, or in the vicinity of, physical cultural resources site recognized by the Borrower; and (c) projects specifically designed to support the management or conservation of physical cultural resources.

#### Mechanisms to achieve policy objectives:

- The Borrower assesses the project's potential impacts on physical cultural resources as an integral component of the Environmental Assessment (EA). The process steps for the physical cultural resources component of the EA are the same for Category A and B projects.
- The physical cultural resources component of the EA provides for (a) an assessment of physical cultural resources likely to be affected by the project, (b) documentation of the characteristics and significance of the these resources, and (c) an assessment of the nature and extent of potential direct and indirect impacts on these resources.
- Where the EA predicts adverse impacts on physical cultural resources, the cultural resources component of the EA includes a management plan which includes: (a) actions to mitigate adverse impacts, (b) provisions for the treatment of physical cultural resources discovered during project implementation and operation (hereafter referred to as "chance finds"), (c) any necessary measures

for strengthening institutional capacity to implement the management plan, and (d) a monitoring system to track progress of these activities.

#### Consultation & Disclosure (see also the World Bank Policy on Access to Information):

- The Borrower consults relevant stakeholders as part of the overall consultation process for the EA, including relevant project-affected groups, concerned government authorities, and relevant NGOs in documenting the presence and significance of physical cultural resources, assessing potential impacts, and exploring avoidance and mitigation options.
- The findings of the cultural resources component of the EA are normally disclosed to the public as per OP 4.01, except where the Borrower, in consultation with the World Bank and persons of relevant expertise, determines that such disclosure would compromise or jeopardize the safety or integrity of the physical cultural resources involved (e.g. the location of sacred sites or movable cultural resources of value), or would endanger the source of information about the physical cultural resources. In such cases, sensitive information relating to these particular aspects may be omitted from the EA report.

#### 6) Natural Habitats (OP 4.04)

#### **Objective:**

The conservation of natural habitats is essential to safeguard their unique biodiversity and to maintain environmental services and products for human society and for long-term sustainable development. The World Bank therefore supports the protection, maintenance, and rehabilitation of natural habitats and their functions in its project financing, as well as policy dialogue and economic and sector work. The World Bank supports, and expects Borrowers to apply, a precautionary approach to natural resource management to ensure opportunities for environmentally sustainable development.

#### **Triggers:**

The Natural Habitats Policy is triggered by any project (including any subproject under a sector investment or financial intermediary loan) with the potential to cause significant conversion (loss) or degradation of natural habitats, whether directly (through construction) or indirectly (through human activities induced by the project).

<u>Natural habitats</u> are land and water areas where most of the original native plant and animal species are still present (see OP 4.04, Annex A for full definition).Natural habitats comprise many types of terrestrial, freshwater, coastal, and marine ecosystems. They include areas lightly modified by human activities, but retaining their ecological functions and most native species. <u>Significant conversion</u> is the elimination or severe diminution of the integrity of a critical or other natural habitat caused by a major, long-term change in land or water use. Significant conversion may include, for example, land clearing; replacement of natural vegetation (e.g., by crops or tree plantations); permanent flooding (e.g., by a reservoir); drainage, dredging, filling, or channelization of wetlands; or surface mining. In both terrestrial and aquatic ecosystems, conversion of natural habitats can occur as the result of severe pollution. Conversion can result directly from the action of a project or through an indirect mechanism (e.g., through induced settlement along a road).

<u>Degradation</u> is modification of a critical or other natural habitat that substantially reduces the habitat's ability to maintain viable populations of its native species.

#### Mechanisms for achieving policy objectives:

The Natural Habitats Policy distinguishes between critical and other natural habitats.

Critical natural habitats are:

(i) existing protected areas and areas officially proposed by governments as protected areas (e.g., reserves that meet the criteria of the World Conservation Union [IUCN] classifications), areas initially recognized as protected by traditional local communities (e.g., sacred groves), and sites that maintain conditions vital for the viability of these protected areas (as determined by the environ-mental assessment process); or

(ii) sites identified on supplementary lists prepared by the World Bank or an authoritative source determined the World Bank. Such sites may include areas recognized by traditional local communities (e.g., sacred groves); areas with known high suitability for bio-diversity conservation; and sites that are critical for rare, vulnerable, migratory, or endangered species. Listings are based on systematic evaluations of such factors as species richness; the degree of endemism, rarity, and vulnerability of component species; representativeness; and integrity of ecosystem processes.

The World Bank does not support projects that, in the World Bank's opinion, involve the significant conversion or degradation of critical natural habitats. The environmental assessment process (OP 4.01) should identify any critical natural habitats within a proposed project's area of influence.

Wherever feasible, World Bank-financed projects are sited on lands already converted (excluding any lands that in the World Bank's opinion were converted in anticipation of the project). The World Bank does not support projects involving the significant conversion of **non-critical** natural habitats unless there are no feasible alternatives for the project and its siting, and comprehensive analysis demonstrates that overall benefits from the project substantially outweigh the environmental costs (see OP 4.04, Para. 5). If significant conversion or degradation of a non-critical natural habitat is needed to achieve a project's key objectives, the project must include mitigation measures acceptable to the World Bank. Such mitigation measures include, as appropriate, minimizing habitat loss (e.g., strategic habitat retention and post-development restoration) and establishing and maintaining an ecologically similar protected area under the same project.

## Consultation and Disclosure Requirements (see also the World Bank Policy on Access to Information)

In projects subject to the Natural Habitats Policy, the public consultation and document disclosure requirements are those required under the EA Policy (OP 4.01). Aside from the required EA documentation (including the Environmental Management Plan), no free-standing document is automatically required for all projects which trigger the Natural Habitats Policy. However, in the process of complying with this policy, many projects generate free-standing reports (such as protected area Management Plans) which should be made publicly available as a matter of good practice.

#### 7) Projects on International Waterways (OP 7.50)

#### **Objectives:**

To ensure that World Bank-financed projects affecting international waterways would not affect:

- i. relations between the World Bank and its Borrowers and between states (whether members of the World Bank or not), and
- ii. the efficient utilization and protection of international waterways.

#### **Triggers:**

This policy covers the following types of international waterways:

- a) Any river, canal, lake, or similar body of water that forms a boundary between, or any river or body of surface water that flows through, two or more states, whether World Bank members or not;
- b) Any tributary or other body of surface water that is a component of any waterway described under (a); and

c) Any bay, gulf strait, or channel bounded by two or more states, or if within one state recognized as a necessary channel of communication between the open sea and other states, and any river flowing into such waters.

This policy applies to the following types of projects:

- a) Hydroelectric, irrigation, flood control, navigation, drainage, water and sewerage, industrial, and similar projects that involve the use or potential pollution of international waterways as described in para 1 of OP 7.50; and
- b) Detailed design and engineering studies of projects under (a) above, including those to be carried out by the World Bank as executing agency or in any other capacity.

#### Mechanisms for achieving policy objectives:

- Ascertain whether the riparian states have entered into agreements or arrangements or have established any institutional framework for the waterway concerned;
- Beneficiary state must formally notify the other riparian states of the proposed project and its details.

#### **Consultation and Disclosure Requirements:**

Beneficiary state must notify other riparian states of proposed project and its details. If the prospective Borrower indicates to the World Bank that it does not wish to give notification, normally the World Bank itself does so. If the Borrower also objects to the World Bank's doing so, the World Bank discontinues processing of the project. The executive directors concerned are informed of these developments and any further steps taken. Following notification, if the other riparian states raise objections to the proposed project, the World Bank in appropriate cases may appoint one or more independent experts to examine the issues in accordance with <u>BP 7.50, paras. 8-12</u>. Should the World Bank decide to proceed with the project despite the objections of the other riparian states, the World Bank informs them of its decision.

#### 8) Projects in Disputed Areas (OP 7.60)

#### **Objectives:**

To ensure that projects in disputed areas are dealt with at the earliest possible stage:

(a)so as not to affect relations between the World Bank and its member countries;

(b) so as not to affect relations between the Borrower and neighboring countries;

(c) so as not to prejudice the position of either the World Bank or the countries concerned.

#### **Triggers:**

The policy is triggered if the proposed project will be in a "disputed area."

- Is the Borrower involved in any disputes over an area with any of its neighbors?
- Is the project situated in a disputed area?
- Could any component financed or likely to be financed as part of the project situated in a disputed area?

#### Mechanisms for achieving policy objectives:

The World Bank should be satisfied that the other claimants to the disputed area have no objection to the project or special circumstances of the case support the World Bank's financing the project notwithstanding any objection or lack of approval by the other claimants. (OP 7.60, para. 3)

**Consultation and Disclosure Requirements:** 

Project may proceed if governments concerned agree that, pending the settlement of the dispute, the project proposed for country A should go forward without prejudice to the claims of country B.

The MOP bears a disclaimer stating that, by supporting the project, the World Bank does not intend to prejudice the final determination of the parties' claims.

## Annex 4: Environmental Codes of Practice (ECOP) for Small Civil Works

1. Objectives

The Environmental Codes of Practice (ECOP) is prepared to manage small environmental impacts during construction. The ECOPs will apply to manage small scale infrastructure investments subproject. ECOP will be a mandatory part of construction contract or bidding documents so that contractor complies with environmental covenants. PMU and construction supervisors will be responsible for monitoring of compliance with ECOP and preparing the required reports.

There are a number of national technical regulations related to environmental, health and safety that apply to construction activities below:

- Water Quality: (QCVN 01:2009/BYT, QCVN 02:2009/BYT, QCVN 08:2008/BTNMT, QCVN 09:2008/BTNMT, QCVN 10:2008/BTNMT, QCVN 14:2008/BTNMT, TCVN 5502:2003; TCVN 6773:2000, TCVN 6774:2000, TCVN 7222:2002)
- *Air and Soil Quality* (QCVN 05:2008/BTNMT, QCVN 06:2008/BTNMT, QCVN 07:2008/BTNMT
- Solid Waste Management (QCVN 03:2008/BTNMT, TCVN 6438:2001, TCVN 6696:2009, QCVN 07:2009)
- Vibration and Noise (QCVN 27:2010/BTNMT, QCVN 26:2010/BTNMT, TCVN 5949: 1998)
- *Labor Health and Safety*: Decision No.3733/2002/QĐ-BYT issued by Ministry of Healthcare dated on 10/10/2002 about the application of 21 Labor health and safety standards that concerned about microclimate, noise, vibration, Chemicals Permitted level in the working environment

#### 2. Responsibilities

The subproject owner (PMU) and Contractors are the key entities responsible for implementation of this ECOP. Key responsibilities of PMU and the contractors are as follows:

(a) **PMU** 

• PMU is responsible for ensuring that the ECOP is effectively implemented. The PMU will assign a qualified staff to be responsible for checking implementation compliance of Contractors, include the following: (a) monitoring the contractors' compliance with the environmental plan, (b) taking remedial actions in the event of non-compliance and/or adverse impacts, (c) investigating complaints, evaluating and identifying corrective measures; (d) advising the Contractor on environment improvement, awareness, proactive pollution prevention measures; (e) monitoring the activities of Contractors on replying to complaints; (f) providing guidance and on-the-job training to field engineers on various aspects to avoid/mitigate potential negative impacts to local environment and communities during construction.

#### (b) Contractor

• Contractor is responsible for carrying out civil works and informs PMU, local authority and community about construction plan and risks associated with civil works. As such, contractor is responsible for implementing agreed measures to mitigate environmental risks associated with its civil works.

• Contractor is required to obey other national relevant legal regulations and laws.

#### Part 1 – Contractor's Responsibilities

This is an example and is not necessarily a full treatment of all requirements for a specific project. For example, there might be reason to have contractor deal with sexually transmitted diseases, medical and hazardous waste s (e.g., oil from vehicle or furnace repair and similar, oily rags).

Issues/Risks	Mitigation Measure
1) Dust generation/ Air pollution	• The Contractor implement dust control measures to ensure that the generation of dust is minimized and is not perceived as a nuisance by local residents, maintain a safe working environment, such as:
F	- water dusty roads and construction sites;
	- covering of material stockpiles;
	- Material loads covered and secured during transportation to prevent the scattering of soil, sand, materials, or dust;
	- Exposed soil and material stockpiles shall be protected against wind erosion.
2) Noise and vibration	• All vehicles must have appropriate " <i>Certificate of conformity from inspection of quality, technical safety and environmental protection</i> " following Decision No. 35/2005/QD-BGTVT; to avoid exceeding noise emission from poorly maintained machines.
3) Water pollution	• Portable or constructed toilets must be provided on site for construction workers. Wastewater from toilets as well as kitchens, showers, sinks, etc. shall be discharged into a conservancy tank for removal from the site or discharged into municipal sewerage systems; there should be no direct discharges to any water body.
	• Wastewater over permissible values set by relevant Vietnam technical standards/regulations must be collected in a conservancy tank and removed from site by licensed waste collectors.
	• At completion of construction works, water collection tanks and septic tanks shall be covered and effectively sealed off.
4) Drainage and sedimentation	• The Contractor shall follow the detailed drainage design included in the construction plans, to ensure drainage system is always maintained cleared of mud and other obstructions.
	• Areas of the site not disturbed by construction activities shall be maintained in their existing conditions.
5) Solid waste	• At all places of work, the Contractor shall provide litter bins, containers and refuse collection facilities.
	• Solid waste may be temporarily stored on site in a designated area approved by the Construction Supervision Consultant and relevant local authorities prior to collection and disposal.
	• Waste storage containers shall be covered, tip-proof, weatherproof and scavenger proof.
	• No burning, on-site burying or dumping of solid waste shall occur.
	• Recyclable materials such as wooden plates for trench works, steel, scaffolding material, site holding, packaging material, etc. shall be collected and separated on-site from other waste sources for reuse, for use as fill, or for sale.
	• If not removed off site, solid waste or construction debris shall be disposed of only at sites identified and approved by the Construction Supervision Consultant and included in the solid waste plan. Under no circumstances shall the contractor dispose of any material in environmentally sensitive areas, such as in areas of natural habitat or in watercourses.
6) Chemical or hazardous wastes	• Used oil and grease shall be removed from site and sold to an approved used oil recycling company.
	• Used oil, lubricants, cleaning materials, etc. from the maintenance of vehicles and machinery shall be collected in holding tanks and removed from site by a specialized oil recycling company for disposal at an approved hazardous waste site.

Issues/Risks	Mitigation Measure
	• Unused or rejected tar or bituminous products shall be returned to the supplier's production
	<ul> <li>Store chemicals in safe manner, such as roofing, fenced and appropriate labeling.</li> </ul>
	- Store enemieurs in sure manner, such as rooming, reneed and appropriate ademing.
7) Disruption of	• Areas to be cleared should be minimized as much as possible.
and ecological resources	• The Contractor shall remove topsoil from all areas where topsoil will be impacted on by rehabilitation activities, including temporary activities such as storage and stockpiling, etc; the stripped topsoil shall be stockpiled in areas agreed with the Construction Supervision Consultant for later use in re-vegetation and shall be adequately protected.
	• The application of chemicals for vegetation clearing is not permitted.
	• Prohibit cutting of any tree unless explicitly authorized in the vegetation clearing plan.
	• When needed, erect temporary protective fencing to efficiently protect the preserved trees before commencement of any works within the site.
	• The Contractor shall ensure that no hunting, trapping shooting, poisoning of fauna takes place.
8) Traffic management	• Before construction, carry out consultations with local government and community and with traffic police.
	• Significant increases in number of vehicle trips must be covered in a construction plan previously approved. Routing, especially of heavy vehicles, needs to take into account sensitive sites such as schools, hospitals, and markets.
	• Installation of lighting at night must be done if this is necessary to ensure safe traffic circulation.
	• Place signs around the construction areas to facilitate traffic movement, provide directions to various components of the works, and provide safety advice and warning.
	• Employing safe traffic control measures, including road/rivers/canal signs and flag persons to warn of dangerous conditions.
	• Avoid material transportation for construction during rush hour.
	• Signpost shall be installed appropriately in both water-ways and roads where necessary.
9) Interruption of utility services	• Provide information to affected households on working schedules as well as planned disruptions of water/power at least 2 days in advance.
	• Any damages to existing utility systems of cable shall be reported to authorities and repaired as soon as possible.
10) Restoration of affected areas	• Cleared areas such as disposal areas, site facilities, workers' camps, stockpiles areas, working platforms and any areas temporarily occupied during construction of the project works shall be restored using landscaping, adequate drainage and revegetation.
	• Trees shall be planted at exposed land and on slopes to prevent or reduce land collapse and keep stability of slopes.
	• Soil contaminated with chemicals or hazardous substances shall be removed and transported and buried in waste disposal areas.
11) Worker and public Safety	• Training workers on occupational safety regulations and provide sufficient protective clothing for workers in accordance with applicable Vietnamese laws.
	• Install fences, barriers, dangerous warning/prohibition site around the construction area which showing potential danger to public people.
	• The contractor shall provide safety measures as installation of fences, barriers warning signs, lighting system against traffic accidents as well as other risk to people and sensitive areas.
	• If previous assessments indicate there could be unexploded ordnance (UXO), clearance must be done by qualified personnel and as per detailed plans approved by the Construction Engineer.

Issues/Risks	Mitigation Measure
12) Solid waste generated from rehabilitation	• The Contractor shall develop a solid waste control procedure (storage, provision of bins, site clean-up schedule, bin clean-out schedule, etc.) before construction and strictly comply with developed procedure during construction activities.
	• The Contractor shall provide litter bins, containers and waste collection facilities at all places of work.
	• The Contractor store solid waste temporarily on site in a designated place prior to off-site transportation and disposal through a licensed waste collector.
	• The Contractor shall dispose of waste at designated place identified and approved by local authority. Opened burn or bury of solid waste in hospital shall not be allowed. Under no circumstances shall the contractor dispose of any material in environmentally sensitive areas, such as watercourses
	• Recyclable materials such as wooden plates for trench works, steel, scaffolding material, site holding, packaging material, etc shall be segregated and collected on-site from other waste sources for reuse or recycle (sale).
	• The removal of asbestos-containing materials or other toxic substances shall be performed and disposed of by specially trained and certified workers.
13) Communication with local	• The contractor shall coordinate with local authorities (leaders of local communes, leader of villages) for agreed schedules of construction activities at areas nearby sensitive places or at sensitive times (e.g., religious festival days).
communities	• Copies in Vietnamese of these ECOPs and of other relevant environmental safeguard documents shall be made available to local communities and to workers at the site.
	• Disseminate project information to affected parties (for example local authority, enterprises and affected households, etc) through community meetings before construction commencement.
	• Provide a community relations contact from whom interested parties can receive information on site activities, project status and project implementation results.
	• Inform local residents about construction and work schedules, interruption of services, traffic detour routes and provisional bus routes, blasting and demolition, as appropriate.
	• Notification boards shall be erected at all construction sites providing information about the project, as well as contact information about the site managers, environmental staff, health and safety staff, telephone numbers and other contact information so that any affected people can have the channel to voice their concerns and suggestions.
14) Chance find procedures	• If the Contractor discovers archeological sites, historical sites, remains and objects, including graveyards and/or individual graves during excavation or construction, the Contractor shall:
	<ul> <li>Stop the construction activities in the area of the chance find;</li> <li>Delineate the discovered site or error.</li> </ul>
	<ul> <li>Define the discovered site of area;</li> <li>Secure the site to prevent any damage or loss of removable objects. In cases of removable</li> </ul>
	antiquities or sensitive remains, a night guard shall be arranged until the responsible local authorities or the Department of Culture and Information takes over;
	• Notify the Construction Supervision Consultant who in turn will notify responsible local or national authorities in charge of the Cultural Property of Viet Nam (within 24 hours or less);
	• Relevant local or national authorities would be in charge of protecting and preserving the site before deciding on subsequent appropriate procedures. This would require a preliminary evaluation of the findings to be performed. The significance and importance of the findings should be assessed according to the various criteria relevant to cultural heritage; those include the aesthetic, historic, scientific or research, social and economic values;
	• Decisions on how to handle the finding shall be taken by the responsible authorities. This could include changes in the layout (such as when finding an irremovable remain of cultural or archeological importance) conservation, preservation, restoration and salvage;
	• If the cultural sites and/or relics are of high value and site preservation is recommended by

Issues/Risks	Mitigation Measure
	the professionals and required by the cultural relics authority, the Project's Owner will need to make necessary design changes to accommodate the request and preserve the site;
	• Decisions concerning the management of the finding shall be communicated in writing by relevant authorities;
	• Construction works could resume only after permission is granted from the responsible local authorities concerning safeguard of the heritage.

#### Part 2 – Contractor's Workers Environmental Code of Conducts

This is an example for typical project, but for a specific project, some other requirements might be relevant. For example, washing hands protocol, or agreeing to attend STD workshops.

Do:	Do not
• Use the toilet facilities provided – report	• Remove or damage vegetation without direct instruction.
dirty or full facilities	• Make any fires.
<ul> <li>Clear your work areas of litter and building rubbish at the end of each day – use the waste bins provided and ensure</li> </ul>	<ul> <li>Poach, injure, trap, feed or harm any animals – this includes birds, frogs, snakes, etc.</li> </ul>
that litter will not blow away.	• Enter any fenced off or marked area.
• Report all fuel or oil spills immediately	• Drive recklessly or above speed limit
& stop the spill from continuing.	• Allow waste, litter, oils or foreign materials into the stream
<ul> <li>Smoke in designated areas only and dispose of cigarettes and matches</li> </ul>	• Litter or leave food lying around.
carefully. (littering is an offence.)	• Cut trees for any reason outside the approved construction area
• Confine work and storage of equipment	• Buy any wild animals for food;
<ul><li>• Use all safety equipment and comply</li></ul>	<ul> <li>Use unapproved toxic materials, including lead-based paints, asbestos, etc.;</li> </ul>
with all safety procedures.	• Disturb anything with architectural or historical value
<ul> <li>Prevent contamination or pollution of streams and water channels.</li> </ul>	• Use of firearms (except authorized security guards)
• Ensure a working fire extinguisher is	• Use of alcohol by workers during work hours
immediately at hand if any "hot work" is	• Wash cars or machinery in streams or creek
undertaken e.g. Welding, grinding, gas cutting etc.	• Do any maintenance (change of oils and filters) of cars and equipment outside authorized areas
• Report any injury of workers or animals.	<ul> <li>Dispose trash in unauthorized places</li> </ul>
• Drive on designated routes only.	<ul> <li>Have caged wild animals (especially birds) in camps</li> </ul>
• Prevent excessive dust and noise	• Work without safety equipment (including boots and helmets)
	• Create nuisances and disturbances in or near communities
	• Use rivers and streams for washing clothes
	• Dispose indiscriminately rubbish or construction wastes or rubble
	• Spill potential pollutants, such as petroleum products
	Collect firewood
	<ul> <li>Do explosive and chemical fishing</li> </ul>
	• Use latrines outside the designated facilities; and
	• Burn wastes and/or cleared vegetation.

## Annex 5: Environmental management plan (EMP) model

## 1. Subproject description

Provide pertinent background for parties who may conduct the SEMP, whether they are government agencies/sponsors, consultants or NGOs. Include a brief description of the major components of the proposed project, a statement about its need and objectives, the implementing agency, a brief history of the project (including alternatives considered), its current status and timetable, and the identities/natures of any associated projects. A summary description of the environmental setting should be provided.

## 2. Applicable Environmental Legislations

Identify laws, regulations and guidelines likely to govern the conduct of the assessment or specify the content of its report. They may include any or all of the following:

- World Bank Operational Policy; i.e "Environmental Assessment; Public Consultation and Information Disclosure and The World Bank's Environmental, Health and Safety
- National laws and/or regulations on environmental reviews and impact assessments;
- Regional, provincial or communal environmental assessment regulations; and
- EA regulations of any other financing organizations involved in the project.

Identify design or operating standards that project components must meet to be in compliance with environmental safeguards. This will include, for example, air emission standards and occupational health and safety requirements.

3. Overview of Adverse Impacts and Mitigate Measures

*Summary of impacts:* Predicted adverse environmental and social impacts (and any uncertainties about their effects) for which mitigation is necessary should be identified and summarized.

**Description of mitigation measures:** Each measure should be briefly described in relation to the impact(s) and conditions under which it is required. These should be accompanied by, or referenced to, designs, development activities (including equipment descriptions), operating procedures, and implementation responsibilities. Proposed mitigation measures to facilitate public consultation should be clearly described and justified.

The presentation of adverse impacts and mitigation measures can be as follows:

Activities	Environmental Impacts/Issue	Mitigating Measures	Responsibility	Date (Start/End)
Design Phase				
Subproject implementation phase				
Subproject Operation phase				

## 4. Institutional Arrangements

Responsibilities for mitigation, monitoring, and supervision should be defined along with arrangements for information flow, especially for coordination between agencies responsible for mitigation. This is especially important for projects requiring cross-sectoral/Institutional integration. In particular, the EMP specifies who is responsible for undertaking the mitigating and monitoring measures, e.g., for enforcement of remedial actions, monitoring of implementation, training, financing, and reporting. Institutional arrangements should also be crafted to maintain support for agreed enforcement measures for environmental protection.

Where necessary, the EMP should propose strengthening the relevant agencies through such actions as: establishment of appropriate organizational arrangements; appointment of key staff and consultants; and, arrangements for counterpart funding and on-lending.

#### 4.1 Organizations

The organizations in charge of implementation and supervision of the mitigation and monitoring measures can be described via a chart. For example:



## 4.2 Responsibilities

These stakeholders may be involved in the subproject environmental management. The responsibilities of the relevant stakes holders in each subproject should be represented as bellows

No	Organization	Responsibilities	
1	Subproject owner		
2	Design Engineer		
3	PMU		
4	Contractors/Equipment Suppliers		
5	Construction Supervision Consultant		
6	Environmental Consultant		
7	Etc		

#### **5. Monitoring and Reporting**

#### 5.1 Description of monitoring program (where applicable)

The EMP identifies monitoring objectives and specifies the type of monitoring required; it also describes performance indicators which provide linkages between impacts and mitigation measures identified in the EA report, parameters to be measured, methods to be used, sampling location and frequency of measurements, detection limits (as appropriate) and definition of thresholds to signal the need for corrective actions. Monitoring and supervision arrangements should be agreed by the subproject owner and PIU/PMU the Bank and the borrower to: ensure timely detection of conditions requiring remedial measures in keeping with good practice; furnish information and the progress and results of mitigation and institutional strengthening measures; and, assess compliance with national and Bank environmental safeguard policies.

## MONITORING PLAN

What parameter is to be monitored ?	Where Is the parameter to be monitored ?	How Are the parameter to be monitored/ type of monitoring equipment?	When is the parameter to be monitored- frequency of measurement or continuous	Standard applied	MonitoringCostWhat is thecostofequipment orcontractorchargestoperformmonitoring	Responsibility	Report to / frequency	Time (Start/End Date)

## 5.2 Supervision of Contingency Plan Preparation, training activities (where applicable)

For example: contingency plan against fire risk

#### **5.3 Environmental Compliance Framework**

For example Compliance framework for equipment suppliers

6. Capacity Building/Training Plan (where applicable)

Organizer	Course	Participants	Frequency	Duration	Content	Budget

#### 7 Budgets

**Cost estimates:** These should be specified for both the initial investment and recurring expenses for implementing all measures defined in the EMP, integrated into the total project costs and factored into loan negotiations.

It is important to capture all costs – including administrative, design and consultancy, and operational and maintenance costs – resulting from meeting required standards or modifying project design.

#### 8. Consultation and Public Disclosure

Presenting the results of Consultation and Public Disclosure

## 9. Other Information

Include here lists of data sources, project background reports and studies, relevant publications, and other items to which the consultant's attention should be directed.

## **Annex 6: Guidance on Supervision of EMP Implementation**

## 1. Principles

**Borrower's Role**. The Borrower prepares the Project for which it seeks Investment Project Financing. The Project's scope, objectives, and the Borrower's contractual rights and obligations are set out in the legal agreements with the World Bank. The obligations include the requirement to carry out the Project with due diligence, maintain appropriate implementation monitoring and evaluation arrangements, and comply with procurement, financial management, disbursement, social and environmental obligations. The Borrower measures and reports against the achievement of the Project development objectives and results and provides agreed financial and audit reports. The Borrower is expected to deal in a timely and effective manner with actual or alleged problems or violations (individual or systemic) in these areas.

*World Bank's Role*. During Project implementation, the World Bank monitors Borrower compliance with the Borrower's obligations as set out in the legal agreements and provides implementation support to the Borrower by reviewing the Borrower's information on Project implementation progress, progress toward achievement of the Project's development objectives and related results, and updates the risks and related management measures. Implementation support and monitoring carried out by the World Bank during the implementation period ends at the completion of the Project. Project Implementation support covers monitoring, evaluative review, reporting, and technical assistance activities.

The World Bank bases supervision of the project's environmental aspects on the findings and recommendations of the EA, including measures set out in the legal agreements, any EMP, and other project documents.

#### 2. Supervision Objectives:

The supervision objectives for environmental safeguards or EMP implementation during project implementation are imbedded in the following project implementation supervision objectives:

- a) ascertain the project is implemented with due diligence to achieve its development objectives in conformity with the legal agreements, including environmental covenants;
- b) identify environmental and social problems promptly as they arise during implementation and find ways to resolve them;
- c) propose to the World Bank changes in project design, as appropriate, as the project evolves or environmental circumstances change;
- d) identify the key environmental risks to project sustainability and propose appropriate risk management strategies and actions to the World Bank; and
- e) prepare the Borrower's Implementation Completion Report which includes a section on safeguard compliance, and to draw lessons to improve the design of future projects for better environmental outcome.

#### 3. Pre-Construction Phase

#### 3.1. Incorporation of EMP into the Project Operational Manual

Incorporation of EMP into the project operational manual is done only at the project level, not at the subproject level. Usually the Project Operational Manual (POM) will be developed during the project appraisal and before negotiation. Any POM would include a section on environmental safeguards. It is critically important to avoid copying and pasting sections from the EMP into sections or annexes of the Project Operational Manual. This has been documented to be ineffective. Rather, the developer of the EMP, or the Environmental Staff of the PMU should be engaged to work with the project and modify and adapt the EMP into the POM. It is also useful to look for other POM in the country and for other similar World Bank projects and identify those POMs that have practical safeguard related components. Suggested content of a POM is provided in the box below.

#### Suggested Contents for a Project Operational Manual

#### **Brief Project Description**

- overview/ objectives
- environmental context
- policy considerations
- project components (specifying road length, development sites, etc)
- project management: coordination/implementation arrangements

#### **Potential Environmental Impacts of the Project Components**

- overall orders of magnitude/area of influence
- direct, indirect and cumulative impacts
- critical environmental/social issues cumulative

#### **Environmental Safeguards**

- objectives (mainstreaming compliance)
- safeguards triggered by the project components; cross -referencing with pesticide management plan, resettlement action plan, etc)
- monitoring /evaluating the application of the safeguards relevant country environmental legislation/regulations.
- Role of national environment agency e.g., approving sub-projects, monitoring/supervision, etc.

#### **Environmental Management Plan or Variant**

- mitigation measures
- monitoring requirements; key issues/actions, M&E performance indicators
- institutional arrangements/responsibilities, including coordination, staffing and strengthening capability
- scheduling of measures/reporting
- Cost

#### **Monitoring/Reporting Plan**

- key issues/actions for management
- quarterly/annual reports
- M&E performance indicators

## **3.2. Training on Environmental Management After the Loan Agreement Effectiveness**

As a good practice, right after the effectiveness of the loan, PMU will organize a project launching workshop. At this workshop, the World Bank will provide short training on project management including environmental safeguards of the project. The environmental staff of the PMU and related consultants, if already recruited, need to attend the training to become familiar with how the EMP will be implemented during project implementation. The PMU should organize a short training on EMP of each subproject at the local level for the affected local communities and authorities, and the contractor.

#### 3.3. Project Environmental Management System

Usually project environmental management system is considered and included in the EMP to ensure that the project complies with environmental safeguard requirements. This system, which is designed for project and subproject level, includes an environmental management unit of PMU, environmental officer (EO) of the Construction Supervision Consultant/ Supervision Engineer (CSC), Safety and Environmental Officer (SEO) of the Contractor, and Independent Environmental Monitoring Consultant (IEMC), relevant authorities, and the community. Depending on the level of environmental risk of the project, an IEMC may not be needed. However, regardless of the risk level, environmental staff of the PMU, EO, and SEO play a crucial role in ensuring the project safeguard compliance.

Responsibility of these players should be clearly indicated in the EMP. The PMU needs to follow the EMP and ensure that this system is up and functions when the related consultant and contractor are mobilized.

#### **3.4. During Detailed Design**

One of the objectives of the EA process is to identify any environmental issue that can be incorporated into the project design at the early stage of project preparation to enhance positive impact and avoid, minimize, or mitigate potential negative impacts. During project implementation, which starts after the loan agreement becomes effective, the PMU needs to ensure that relevant mitigation measures in the EMP are considered and incorporated in the detailed technical design as appropriate. The steps for this are:

- a) PMU includes requirements for EMP consideration in the TORs for the detailed technical consultant;
- b) PMU includes EMP in the bidding package for detailed technical design;
- c) the detailed technical design consultant refers to finding in the EMP during design process; and
- d) PMU monitors to ensure that relevant mitigation measures in the EMP are addressed in the technical design.

## **3.5. Preparation of Bidding and Contractual Documents for Civil Work**

The EMP is valueless unless it can be implemented as intended. This can only be achieved if the EMP is attached to the tender and contract documents as part of the specifications to be heeded by the contractor, and is addressed by the contractor at the time of bidding. This allows the EMP to be incorporated into the tender and contract process and ensure that:

- a) the EMP is addressed as a condition of the contract,
- b) the EMP is properly costed, and
- c) management systems are established to complying with the EMP.

If the EMP is not properly meshed with the tender and contract documents, the contractor may claim that compliance with it is not a part of the work requirements. Including the EMP in the tender and contract documents is thus a proactive requirement. Otherwise, after the contract has been awarded, it will be too late to enforce the EMP's provisions.

The World Bank uses standard bidding documents of the International Federation of Consulting Engineers (FIDIC) for works package. Within this document, there are two places where the environmental management and monitoring requirements can be put: Part B of Particular Conditions, as supplemental requirements under Sub-Clause 4.18 – Protection of the Environment; Specification, as environmental specifications (usually coded as Specification 01700 – Environmental Management Plan).

The PMU cannot change the content of General Conditions of Contract because it contains clauses and language that are internationally recognized. But, fortunately, in the event of any disagreement between the sections on General Conditions and Particular Conditions or Specifications, Particular Conditions and Specifications always prevail.

Particular Conditions Section provides the detailed of the project's design requirements. So, for example, if there are particular requirements for landscaping requirements for revegetating a slope or a particular design for sediment basin that must be included, this is where the detailed specifications are provided. This section can also include particular performance standards, so if there is a temporary wastewater treatment system required during construction, PMU can include the acceptable parameters for discharge from the system.

Environmental clauses should be explicit and state: what needs to be done; where it needs to be done; when and how the actions will take place; and, who is responsible. PMU in collaboration with the environment specialists of its Environmental Management Unit, engineers, and technicians should use contract conditions and specifications to ensure that the contractor implements mitigation measures effectively.

Close coordination between the environmental and technical teams ensures inclusion of mitigation measures in the design of the project. Design engineers should address mitigation measures in their technical documents (e.g., bill of quantities, drawings and technical specifications), but it should be noted that some documents may refer to general mitigation measures that have to be followed by the technical team and contractor.

To better ensure the implementation of environmental requirements, the EMP or variant may be attached as a legal condition to contract documents or a set of environmental clauses may be prepared and placed directly into contract documents.

PMU also needs to ensure that penalties are imposed in the contract with different level of non-compliance.

The following levels of non-compliance are suggested:

- Noncompliance level I: A noncompliance situation not consistent with the requirements of the concession agreement, but not believed to represent an immediate or severe environmental or social risks. Repeated Level I concerns may become Level II concerns if left corrected.
- Noncompliance Level II: A noncompliance situation that has not yet resulted in clearly identified damage or irreversible impact, but with potential significance requires expeditious corrective action and site-specific attention to prevent sever effects. Repeated Level II concerns may become Level III concerns if left unattended.
- Noncompliance Level III: A critical noncompliance situation, typically including observed significant environmental or social damage or reasonable expectation of very severe impending damage. Intentional disregard of specific prohibitions is also classified as Level III concern.

The FIDIC contract contains a mechanism for stopping work on a project, but this stops all works by the contractor. The best way to ensure that a contractor will comply is to establish penalties that target their schedule of profits. In the noncompliance levels above, a financial penalty is imposed for noncompliance. This can be varied to fit the size of the project and the contractor. For example, a small contractor clearing irrigation canal would suffer a smaller penalty than would a big construction company building an expressway. The level of penalty can also depend on the value of a contract. For example, for Level III noncompliance 1% of the contract value can be deducted from the contractor (e.g. 0.5% for the case of Trung Son Hydropower Project, 1% for the Da Nang-Qang Ngai Expressway Project and the HaiPhong Urban Transport Development Project).

Alternatives include clauses that give the owner the option the owner option to undertake the corrective action and pass on the cost to the contractor plus 15%.

When evaluating bid proposals PMU needs to look at the approach the contractor will use to for environmental management during construction, its previous experiences, and the cost for environmental mitigation.

An example of an Environmental and Social Specification for Contractor for a Category A project and an example of environmental management requirements for Contractor for a Category B project are given in Annex 6 of the ESMF Toolkit.

#### 4. Construction Phase

During construction phase of the project monitoring and supervision of the EMP are undertaken by relevant stakeholders.

## The Contractor:

During the construction phase, the construction Contractor has responsibility in compliance with the technical specifications of the EMP and related national environmental management and technical regulations. Based on the environmental requirements in the contract, the Contractor will prepare detailed site specific environmental management plans (SEMP) for addressing construction related impacts. These SEMPs may include Management Plan for worker camps; Management Plan of the overall construction operation, Solid waste and waste water management plan, Plan for management and mitigation of noise and dust, Plan for management and mitigation of noise and dust, Plan for environmental landscape restoration, and other plans. These SEMP must be reviewed and approved by the CSC and the PMU before commencement of the construction.

The contractor will nominate a Safety and Environmental Officer (SEO) to work full-time at the construction site to monitor implementation of these plans on the ground. The SEO needs to create a log book for internal monitoring and control and regularly reports on the environmental performance of the contractor as required in the contract.

#### Construction Supervision Consultant:

The CSC will undertake supervision of physical work that involves day to day monitoring of physical progress of the works, application of conditions of contract, enforcement of specifications, measuring of works with contractor's representatives, quality control in form of materials testing at laboratory and on site, certification of work done, preparation of interim payment certificates, control of material and equipment on site, issuing of site instructions and variation orders and settlement of disputes (arbitration, conciliation, etc.).

The CSC is also responsible to supervise implementation of mitigation measures carried out by the contractor on a daily basis as required by the conditions of the contract. The environmental specialist of the CSC will developed a methodology and appropriate tools for EMP compliance supervision. Specifically, the CSC will supervise preparation and implementation of the SEMPs. A log book for daily environmental supervision is also maintained by the CSC. In addition to EMP supervision, the CSC may also be tasked activities during construction to enhance environmental management capacity of the PMU and the contractor.

## PMU:

The project owner holds the final responsibility for the environmental performance of the project. The PMU, representative of the project owner, will be responsible for monitoring the overall project implementation, including environmental compliance of the project during construction phase. PMU will have the final responsibility for EMP implementation and

environmental performance of the project during both the construction and operational phases.

Specifically PMU will: i) closely coordinate with local authorities in the participation of the community during project implementation; ii) monitor and supervise EMP implementation including incorporation of EMP into the detailed technical designs and bidding and contractual documents; iii) ensure that an environmental management system is set up and functions properly; iv) be in charge of reporting on EMP implementation to the project owner and the World Bank.

In order to be effective in the implementation process, PMU will establish an Environmental Unit (EU) as mentioned above with at least two environmental staff to help with the environmental aspects of the project. The EU is responsible for monitoring the implementation of the World Bank's environmental safeguard policies in construction stage. Specifically, this unit will be responsible for: i) reviewing different reports submitted by the Contractor, CSC, and IEMC to ensure their quality and taking actions recommended in these reports; ii) conducting periodic site checks; iii) advising PMU on solutions to environmental issues of the project; and iv) preparing environmental performance section on the progress and review reports to be submitted to the project owner and the World Bank.

The EU can base on the EMP supervision forms of the CSC to develop a consolidated form for monitor EMP implementation.

## 5. Reporting

## 5.1. Reporting by CSC

Reporting requirements, including inception report and supervision reports and their contents and frequency of submission, for the CSC should be clearly stated in the TORs for the consultant. the CSC is responsible for day-to-day supervision of EMP implementation by the contractor. Therefore, usually it submits weekly and monthly reports to the PMU. In addition, the CSC may report to the PMU on a case-by-case basis for any noncompliance that needs immediate attention of the project owner.

The PMU is supposed to pay special attention in reviewing findings of the CSC report on EMP implementation for action and follow up on any safeguards issue and EMP noncompliance that the Contractor needs to undertake to rectify.

#### **5.2. Reporting by Contractor**

The contractor reports against the conditions set forth in the contract, which also include reporting on EMP implementation and compliance.

#### 5.3. Reporting by PMU

#### Semi-annual report

During project implementation, the PMU reports on (a) compliance with measures agreed with the World Bank on the basis of the findings and results of the EA, including implementation of any EMP, as set out in the project documents; (b) the status of mitigatory measures; and (c) the findings of monitoring programs.

Specifically, the Progress Report from the PMU submitted to the World Bank before a World Bank mission must include sufficient information on:

- i) preparation and disclosures of environmental safeguards instruments for subprojects;
- ii) incorporation of new subproject EMPs in the bidding and contractual documents;
- iii) monitoring and supervision of EMP implementation by the contractor, the construction supervision engineer, and the PMU;
- iv) the status and compliance with mitigation measures in the EMP; and
- v) any challenges in safeguard implementation, solutions, and lessons learned.

#### Mid-term review

During the mid-term review (MTR), PMU will:

- Assess the impacts from any changes in project design or new components introduced as a result of any restructuring and, if required, agree upon revised safeguards management plan, monitoring and reporting requirements.
- Pay special attention (MTR) to issues of non-compliance. In case of any noncompliance or unresolved safeguards issues propose additional measures with World Bank.
- Agree on revisions to safeguard management plans, monitoring requirements and reporting if relevant.
- Document these issues in the progress report for MTR to be submitted to the World Bank.

## Project Implementation Completion and Results Report

After the completion of the Project, or in certain cases of additional financing or in certain cases of series of projects, prior to the Project completion, the World Bank prepares an implementation completion and results report (ICR). The ICR covers, among other things, the degree to which the Project development objectives and results have been achieved and the overall Project performance, taking into consideration the Project operating environment. The ICR incorporates the Borrower's evaluation of the Project, its own performance and the performance of the World Bank, if available.

The Borrower is responsible for preparing and submitting to the World Bank its own completion report. The completion report/summary should include, among other section, a section on safeguard compliance. The overall objective of this section is to review of safeguard outcomes and lessons learned. This section summarizes:

(1) key safeguard issues in the operation;

- (2) compliance with the World Bank safeguard policy and procedural requirements;
- (3) any problems that arose and their resolution, as applicable; and
- (4) any significant deviations or waivers from the World Bank safeguards/fiduciary policies and procedures.

# Annex 8: Sample Format for Checklist on Environmentally Friendly Design Criteria

General Information					
Name of Project	Name rehabil	of itation/c	site onstruction	for office	
Name of engineer/ technical officer	Person	(s) who c	conducted the	studies	
Date of Site Study Completed	The date on which the on site studies were completed.				
Information Source	Name a	nd conte	act of person(	s) contacted	
Proposed Output	Office constru	rehab ction	ilitation or	r new office	
Design Criteria	Yes	No	Unknown	Remark	
1.Maximizing the blending of architectural design to important cultural site next or nearby to the site.					
2.Maximizing natural light in order to minimize artificial light needs.					
3.Maximizing natural ventilation systems, minimizing the necessities of air conditioning					
4.Maximizing rain water storage for the irrigation of gardens and green zones in the office (where applicable)					
5.Promoting the usage of environment- friendly materials (avoid asbestos and other hazardous or toxic materials)					
6.Planting of native species in gardens and green areas in the offices (where applicable)					
7.Stabilization of slopes using vegetative measures (where required)					
8.Adequateness of fire safety system					
9.etc					
Others (describe)					