



environmental assessment resource kit:

**A Resource Kit for CIDA
Projects in the Philippines**



March 2008



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ANNEXES





acronyn

CCC	Center for Corporate Citizenship
CCT	Cross-Cutting Theme
CEAA	Canadian Environmental Assessment Act
CNC	Certificate of Non-Coverage
CP	Cleaner Production
DAO	Department Administrative Order
EA	Environmental Assessment
ECA	Environmental Critical Areas
ECC	Environmental Compliance Certificate
ECP	Environmentally Critical Projects
EIA	Environmental Impact Assessment
EMA	Environmental Management Accounting/Auditing
EMB	Environmental Management Bureau
EMS	Environmental Management System
ERA	Environmental Risk Analysis
GSC	Greening the Supply Chain Project
IFC	International Finance Corporation
LCA	Life Cycle Analysis
LCM	Life Cycle Management
LGU	Local Government Units
PBE	Philippine Business for Environment
PBSP	Philippine Business for Social Progress
PCAPI	Pollution Control Association of the Philippines, Inc.
PD	Presidential Decree
PEIS	Philippine Environmental Impact Statement
PICPA	Philippine Institute of Certified Public Accountants
PIEP	Philippine Institute of Environmental Planners
PSD	Private Sector Development
SEA	Strategic Environmental Assessment
SWAPP	Solid Waste Management Association of the Philippines



Canada accords priority to the environment in the design of its country development strategies and programs. To achieve this objective, it has adopted an environmental assessment system to ensure that development projects and programmes being pursued by the Canadian government are attuned and consistent with the objectives of sustainable development. In 1990, Cabinet directed departments to consider environmental concerns in the development of their policies, plans and programs.

CIDA's *Policy for Environmental Sustainability* in 1992 officially commits it to the promotion of sustainable development through environmentally sound policies, programs and projects, and other means. The policy is to integrate environmental considerations into CIDA's decision making and activities, and to work with its partners and developing countries in improving their capacity to promote environmentally sustainable development.

In January 1995, the Canadian parliament promulgated the *Canadian Environmental Assessment Act (CEAA)* to promote development that conserves and enhances environmental quality within and outside Canada. The Act sets out the responsibilities and procedures for the environmental assessment of projects involving the federal government. It applies to projects for which the federal government holds decision-making authority — whether as a proponent, land administrator, source of funding or regulator. The CEAA governs Canada's environmental assessment (EA) process.

In 1999, a Cabinet Directive or the *1999 Cabinet Directive on the Environmental Assessment of Policy, Plan and Program Proposals* was issued to clarify the obligations of departments and agencies with regard to strategic environmental assessment (SEA). It also linked environmental assessment to the implementation of Sustainable Development Strategies. SEA is an analytical tool to link possible positive or negative environmental issues to higher level decision-making. SEA is, in many ways, similar to environmental assessment for projects.

Likewise, the Philippines had been implementing an environmental assessment system as early as the 1970's. Presidential Decree (PD) No. 1151, otherwise known as the "Philippine Environmental Policy," is the first policy issuance on Environmental Impact Statement (EIS) System in the Philippines. Effective since 1977, section 4 thereof explicitly requires "*all agencies and instrumentalities of the national government, including government-owned and controlled corporations, as well as private corporations, firms and entities to prepare an environmental impact statement (EIS) for every action, project or undertaking which significantly affects the quality of the environment.*"

The Philippine EIS System was formally established in 1978 by virtue of PD No. 1586 otherwise known as the “Philippine Environmental Impact Statement (PEIS) System”. Reiterating the policy statement under PD 1151, it declared environmentally critical projects (ECPs) and projects within environmentally critical areas (ECAs) as projects which require the submission of an EIS. Section 4 thereof provides that “*no person, partnership or corporation shall undertake or operate any such declared ECP or project within an ECA without first securing an Environmental Compliance Certificate (ECC).*” PD 1586 also identified the lead agency for the implementation of the EIS System and provided sanctions for its violation. Today the Philippine EIS system is implemented by the Department of Environment and Natural Resources through its Environmental Management Bureau.

Today, the implementing guidelines for the Philippine environmental assessment system is primarily contained in DENR Administrative Order No. 30-2003 or the “EIA Operations Manual” that outlines the procedures and processes in the application of environmental assessment for development projects in the Philippines.

For both countries, ensuring environmental sustainability has been the enduring basis for the institutionalisation of country environmental assessment systems such as the CEAA and PEIS as part of its national enabling policy. But more importantly, both countries recognise the critical role played by the environment in addressing not only national but also global sustainability and development goals such as the Millennium Development Goals (MDGs) to address issues of poverty and sustainable development¹. In this context, ensuring that environmental sustainability and environmental concerns are addressed in all aspects of development initiatives, programmes, plans and projects and its implementation has been deemed a common concern.

This environmental assessment resource kit is meant to serve as a learning material to provide a better understanding on the application of the Canadian and Philippine environmental assessment systems in the context of CIDA-funded development projects and programmes. This EA Resource Kit hopes to facilitate and guide CIDA Mission programme officers, project and programme partners with a resource material to enable them to ensure environmental sustainability and consistency of CIDA projects with Canadian and Philippine environmental laws and policies. But more importantly, this resource kit endeavours to provide a broader understanding and application of environmental sustainability not only as a cross-cutting theme in ALL CIDA initiatives in the Philippines, and indeed, in all countries it works with but more so as a clear manifestation of CIDA’s Policy on Environmental Sustainability to integrate environmental considerations in all aspects of a country’s development. 🌱

¹ The MDGs thus capture environmental concerns under Goal #7 which highlights the need to ensure environmental sustainability to efficiently combat poverty and support sustainable development. It aims for the integration of sustainable development principles into country policies and programs as well as for reversing the loss of environmental resources. It also contains targets for improving access to environmental services, that is to reduce by half the proportion of people without sustainable access to safe drinking water and basic sanitation, by 2015, and to achieve significant improvements in lives of at least 100 million slum dwellers, by 2020.

objectives and organisation of the resource kit

B

1.0 Resource Kit Objectives

The objectives of the Resource Kit are the following:

- Provide a general understanding and appreciation of the Canadian Government's Policy on Environmental Sustainability and its commitment to ensure the integration of environmental considerations in ALL development initiatives promoted by the Canadian government, through CIDA projects, in the Philippine context.
- Present a broad overview of Canadian Government and CIDA environmental assessment (EA) policies and procedures that are applied to CIDA-funded programmes and projects in the Philippines;
- Present a general orientation of Canadian and Philippine environmental assessment procedures and processes, and implementation arrangements;
- Identify practical steps and tools to guide CIDA Mission officers and project partners in ensuring environmental sustainability and consistency of CIDA-funded projects and sub-projects to Canadian and Philippine environmental laws and policies; and
- Present a list of available references and resource materials on environmental assessment, analysis and applications for use by CIDA local partners.

2.0 Organisation of the Resource Kit

The Resource Kit is organised into three major sections: a) Operational applications and processes of EA based on CEAA and Philippine Environmental laws; b) EA tools for CIDA Projects and sub-projects; and c) Annexes. The annexes include: templates; useful references and materials; list of environmental resource persons and groups; and other resources. 🌿

resource kit's intended users

C

This Resource Kit is intended to be used by CIDA programme and project partners in the Philippines as a practical and handy reference tool on environmental assessment (EA) procedures and processes being applied by CIDA and Philippine agencies to ensure environmental sustainability and consistency of CIDA-funded projects and sub-projects with Canadian and Philippine environmental laws and policies. It is also intended to be a guide for CIDA Mission staff in monitoring and supervision of CIDA-funded programmes and projects for consistency and compliance with CIDA's Policy on Environmental Sustainability and CEAA. 🌿

What is an environmental assessment (EA)?

1.0 EA in the Canadian and Philippine context.

Environmental assessment (EA) is an adaptive *process* for project planning that leads to *products* which support *decision-making* for sustainable development.² (see Box 1).

It is an essential tool and process adopted by CIDA to minimize adverse impacts and ensure that no CIDA action may cause significant environmental impacts without prior consideration of options and justification for such impacts.

Box 1: EA as a Development Planning Tool at CIDA

The EA *process* determines

- How, when, and which environmental impacts effects are identified and examined;
- Level of public involvement necessary to improve project design and implementation
- Level of rigour for the analysis of alternatives, cumulative environmental effects, and need for follow-up
- Procedural steps necessary to comply with legal requirements

which leads to?

EA *products*, such as

- Environmental baseline data
- Environmental screening reports
- Environmental management plan

which are used to
informed *decision-making* on

- Sustainable development in developing countries, in order to reduce poverty and to contribute to a more secure, equitable and prosperous world.

Source: CEAA and Roadmap 5.0 Environmental Assessment Procedures for Geographic Programs Roadmap, CIDA, October 2001, p. 3.

Applying EA to development projects helps CIDA and its partners to maximise the value of their development efforts and contributions to sustainable human development.

EA is about taking environmental considerations fully into account to prevent avoidable environmental risks in the delivery of development assistance. As a planning tool supportive of sustainable development, EA helps project proponents to balance the trade-offs between the developmental value of CIDA projects and their possible

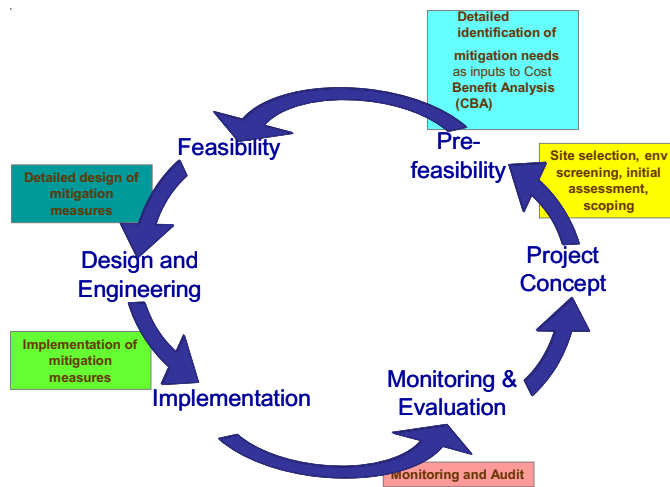
adverse environmental implications. The CIDA EA process is primarily guided by the 1992 CIDA Policy on Environmental Sustainability and the CEAA.³

The EA in the Philippine context is an environmental impact assessment (EIA) process that shares almost the same objectives and definitions of the Canadian EA system. Under the PEIS, the EA is primarily used to assess the direct and indirect impacts of a project on the biophysical and human environment and ensure that these impacts are addressed by appropriate environmental protection and enhancement measures. It also sees the use of the EIA to enhance planning and to guide decision-making in the whole project cycle (See Fig. 1).

² EA, in the Canadian context, is frequently referred to as environmental impact assessment (EIA).

³ Although CIDA's Policy of Environmental Sustainability endorses environmental assessment of projects, it is the CEAA which governs how such assessments are conducted.

Figure 1: EIA and Project Cycle



Source: DAO30-2003: EIA Operations Manual

In this context, decision-making refers to DENR’s issuance of an ECC so that the proposed project can proceed to implementation. The other aspect of decision-making refers to the incremental, technical decision-making that occurs throughout the planning process (e.g. identification and selection of alternatives).

The PEIS is defined under PD1586 and further detailed through the DAO 30-2003 or the EIA Operations Manual. Under these two guidelines, the following are the key operating principles in the implementation of the Philippine EIS System:

- Aids proponents incorporating environmental considerations in planning their projects as well as in determining the environment’s impact on their project;
- Project proponents are responsible for determining and disclosing all relevant information necessary for a methodical assessment of the environmental impacts of their projects.
- The review of the EIS by EMB shall be guided by three general criteria: (1) that environmental considerations are integrated into the overall project planning, (2) that the assessment is technically sound and proposed environmental mitigation measures are effective, and (3) that social acceptability is based on informed public participation.
- Effective regulatory review of the EIS depends largely on timely, full, and accurate disclosure of relevant information by project proponents and other stakeholders in the environmental impact assessment (EIA) process; and
- Social preparation conducted by the proponent for the project is a result of meaningful public participation. This shall be assessed as part of the ECC application, based on concerns related to the project’s environmental impacts.

In the Philippines, there are two types of EA processes applied to ‘projects’ and ‘undertakings’ under PD 1586 or the PEIS. These are the EA for projects and EA for programmatic projects. Further details of these two processes are provided in succeeding sections of this resource book.

2.0 What is the EA process under CEAA and CIDA rules?

There are two types of EA review process that are generally applied to CIDA projects and programmes. These are the EA process under the CEAA and the Strategic Environmental Assessment (SEA) process under the 1999 *Cabinet Directive on the Environmental Assessment of Policy, Plan and Programme Proposals*.

2.1. EA process under CEAA (EA for Projects)

The CEAA is the federal law that mandates Canadian federal authorities, including CIDA, to determine *when* an environmental assessment is required for proposed projects (public and private), and if so, *what* type of environmental assessment is appropriate. The EA process is essentially a two-step process of determining and identifying whether an EA should be conducted for a project.

a. *Step 1: When does the Act apply?*

The guide on *How to Determine if the Act Applies* prepared by the Canadian Environment Assessment Agency (CEAA) explains that, the Act applies when ALL four conditions are met:

- the proposed project meets the **definition** of “project” under the Act (Is there a ‘project’?);
- the project is **not excluded** from having to undergo an EA (Is the Project excluded?);
- the project will necessitate **an action or decision of a federal authority** (Is there a federal authority?); and,
- the specific federal decision “**triggers**” an obligation to ensure that an EA is conducted (Is there a trigger?).

Specifically, there are four questions to answer when determining when an EA is required under the Act as shown in Figure 2.⁴ The four (4) questions should be addressed in sequence. If all four conditions are met, then the next step shall be to determine the type of EA needed to be conducted by the federal agency.

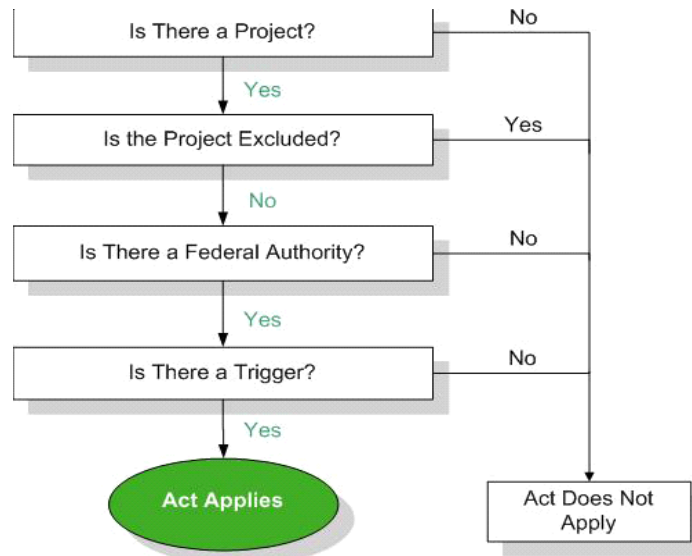
Likewise, EAs are not required for projects that are carried out in response to a *national emergency* for special temporary measures or in response to an *emergency* to a) prevent damage to property or the environment and b) in the interest of public health or safety.

⁴ Details on how to determine if the Act applies to a project are covered in Part 2 (pp.11-24) of the CEAA Guide on How to Determine If the Act Applies, October 2003.

b. *Step 2: Determining the type of EA?*

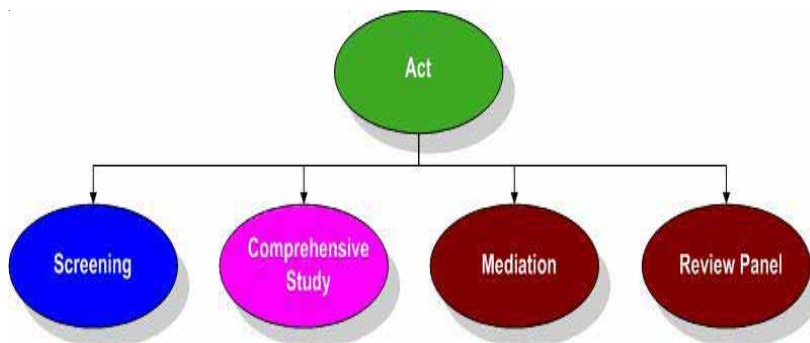
There are four types of EA provided under the CEAA. Depending on the nature of the projects and the significance of possible environmental effects⁵, the types of EA to be conducted for a project are: a) screening, b) comprehensive study, c) mediation or d) review panel (see Figure 3).

Figure 2: Decision Chart to Determine if (CEAA) Act Applies



Source: How to Determine if the Act Applies, CEAA, October 2003, p.11.

Figure 3: Types of Environmental Assessment under the CEAA



Source: How to Determine if the Act Applies, CEAA, October 2003, p.27.

⁵ The Act defines environmental effect as:

- any change that the policy, plan or program proposal may cause in the environment, including any effect of any such change on health and socio-economic conditions, on physical and cultural heritage, on the current use of lands and resources for traditional purposes by Aboriginal persons, or on any structure, site or thing that is of historical, archaeological, paleontological or architectural significance; and,
- any change to the policy, plan or program that may be caused by the environment, whether any such change occurs within or outside Canada.

Table 1: Description of EAs and its Applications

Type of EA	Description	Type of Projects Covered
<i>Screening</i>	<ul style="list-style-type: none"> • Systematic documentation of anticipated environmental effects of a proposed project; • Determines the need to modify project plans; or • Recommend further mitigation to eliminate or minimise these (anticipated) effects • Undertaken by proponent or responsible authority 	<ul style="list-style-type: none"> • Projects which are not on the Comprehensive Study List Regulations and have not been identified as requiring mediation or an assessment by a review panel.
<i>Comprehensive Study</i>	<ul style="list-style-type: none"> • A more stringent type of EA than screening • Eliminate the need for a review panel or mediation by considering any applicable mitigation measures and results to insignificant environmental effects and does not generate a great deal of public concern; or • Unjustifiable and significant environmental effects. • Undertaken by proponent or responsible authority 	<ul style="list-style-type: none"> • Projects identified in Comprehensive Study List Regulations, e.g. large-scale complex projects that are likely to have significant adverse environmental effects.
<i>Mediation</i>	<ul style="list-style-type: none"> • Formal type of EA • Voluntary process of negotiation with an independent and impartial mediator, appointed by Minister of Environment, helps parties resolve their issues • Non-adversarial, collaborative approach to solving problems and generating agreements where consensus is possible; • Advisory rather than a decision-making process 	<p>Projects that have been referred directly because:</p> <ul style="list-style-type: none"> • Uncertainty about whether the project is likely to cause significant adverse environmental effects; • Likely to cause significant adverse environmental effects and it is uncertain whether these effects are justified in the circumstances; or • Public concern warrants it.
<i>Review panel</i>	<ul style="list-style-type: none"> • Impartial and objective body appointed with the objective of reviewing and assessing projects that may have potential for causing significant adverse environmental effects or where public concern warrants; • Advisory rather than decision-making process; recommendations are submitted to Minister of Environment or responsible authority. 	

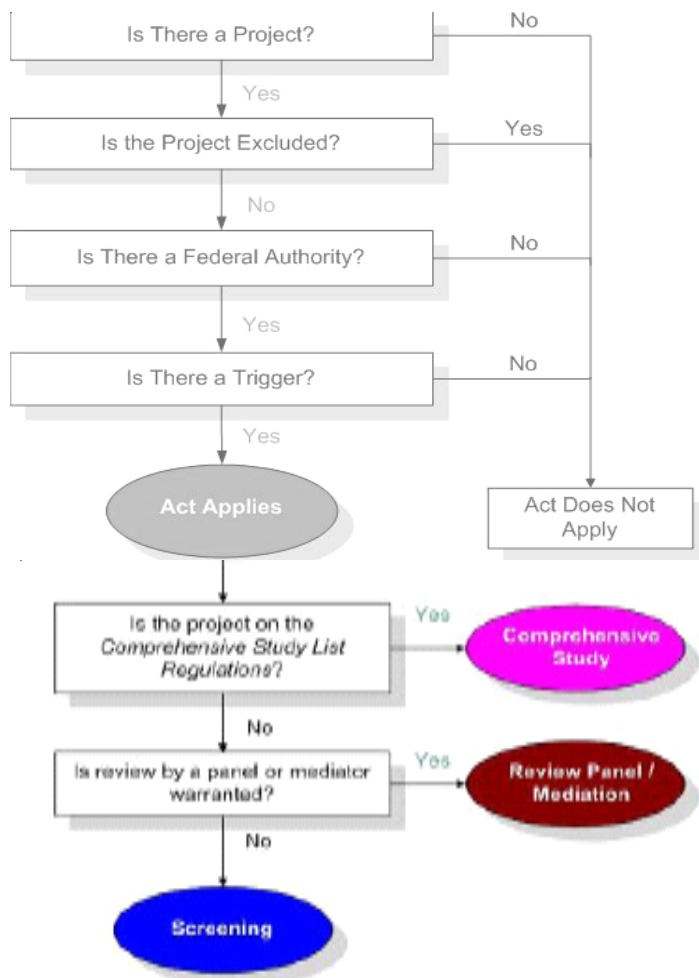
Source: How to Determine if the Act Applies, CEAA, October 2003.

Both *screening* and *comprehensive study* are considered self-directed EAs because responsible authorities are directly tasked to ensure the assessment is conducted in accordance with the CEAA.⁶ *Mediation* and *review panel (independent)* are not considered self-directed EAs and are conducted for a project if the significance of the environmental effects is a) *uncertain*, b) *significant effects are likely*, or c) *public concern warrants an EA*.

CIDA's CEAA Compliance forms are contained in Annex 1 (Templates) of this kit.

Table 1 from the previous page describes the different types of EAs and its application to 'projects' considered covered under the CEAA while Figure 4 below shows the decision flow for the determination of the type of EA.

Figure 4: Decision Chart to Determine Type of EA



Source: How to Determine if the Act Applies, CEAA, October 2003, p.31.

⁶ Majority of federal projects requiring an EA normally undergo either a screening or a comprehensive study

2.2. CIDA's Strategic Environmental Assessment (SEA) for Policy, Plans and Programme Proposals (EA for Policy, Plans and Programme Proposals)

The 1999 *Cabinet Directive on the Environmental Assessment of Policy, Plan and Programme Proposals* is the policy framework that integrates environmental concerns in the development of policies, plans and programs through the conduct of a strategic environmental assessment (SEA) process. It also links EA to the implementation of sustainable development strategies.

a. *What is Strategic Environmental Assessment (SEA)?*

The CIDA Handbook on Strategic Environmental Assessment (SEA) of Policy, Plan and Program Proposals defines SEA as: “the systematic and comprehensive process of evaluation of the environmental effects of a policy, plan or program and its alternatives.” It is an analytical tool to link positive or negative environmental issues to higher-level decision-making. An SEA explicitly documents the consideration of any potential environmental effects that may result from a policy, plan or program proposal.

An SEA must also demonstrate that environmental factors have been integrated into decision-making process and must show how these findings have influenced the final product. It is similar to EA for projects (under the CEAA) as it involves answering a series of questions *during* the development of a policy, plan or program proposal.

b. *What determines the conduct of an SEA?*

Box 2: Documents Requiring an SEA

For CIDA, an SEA would typically be conducted for the following documents:

- Allocations memoranda and other memoranda to Cabinet (MCs)
- Country (and regional) development programming frameworks (C/RDPFs);
- Strategic plans;
- Policies
- Development programs
- Action plans
- Sector-wide approaches (SWAps)
- Sectoral reviews and guidelines
- Implementation plans
- Treasury Board submissions

Source: SEA of Policy, Plan and Program Proposals: CIDA Handbook, 2004, p.3.

An SEA for a CIDA policy, plan or program proposal is *expected* when the following two conditions are met:

- a proposal is submitted to an individual Minister or to Cabinet for approval, **AND**,
- implementation of the proposal may result in important environmental effects, whether positive or negative.

As with the EA for projects, SEAs are also conducted for other policy, plan or program proposals when circumstances warrant such strong public concerns about possible environmental consequences.

Box 2 taken from the CIDA SEA Handbook presents a sample list of CIDA documents where an SEA may be required.

c. When is an SEA not required?

Similar to the EA for Projects under the CEAA, SEAs for policy, plan and programme proposals may not be required for special cases (as documented in the Directive) such as proposals that are:

- Response to a clear and immediate emergency where time is insufficient to undertake an SEA,
- Matter is of such urgency that normal process of Cabinet consideration is shortened and even a simplified SEA cannot be conducted; and,
- Issues that have been previously assessed for their environmental impact or assessed as a project under the CEAA.

d. Conduct of an SEA Process and Checklist

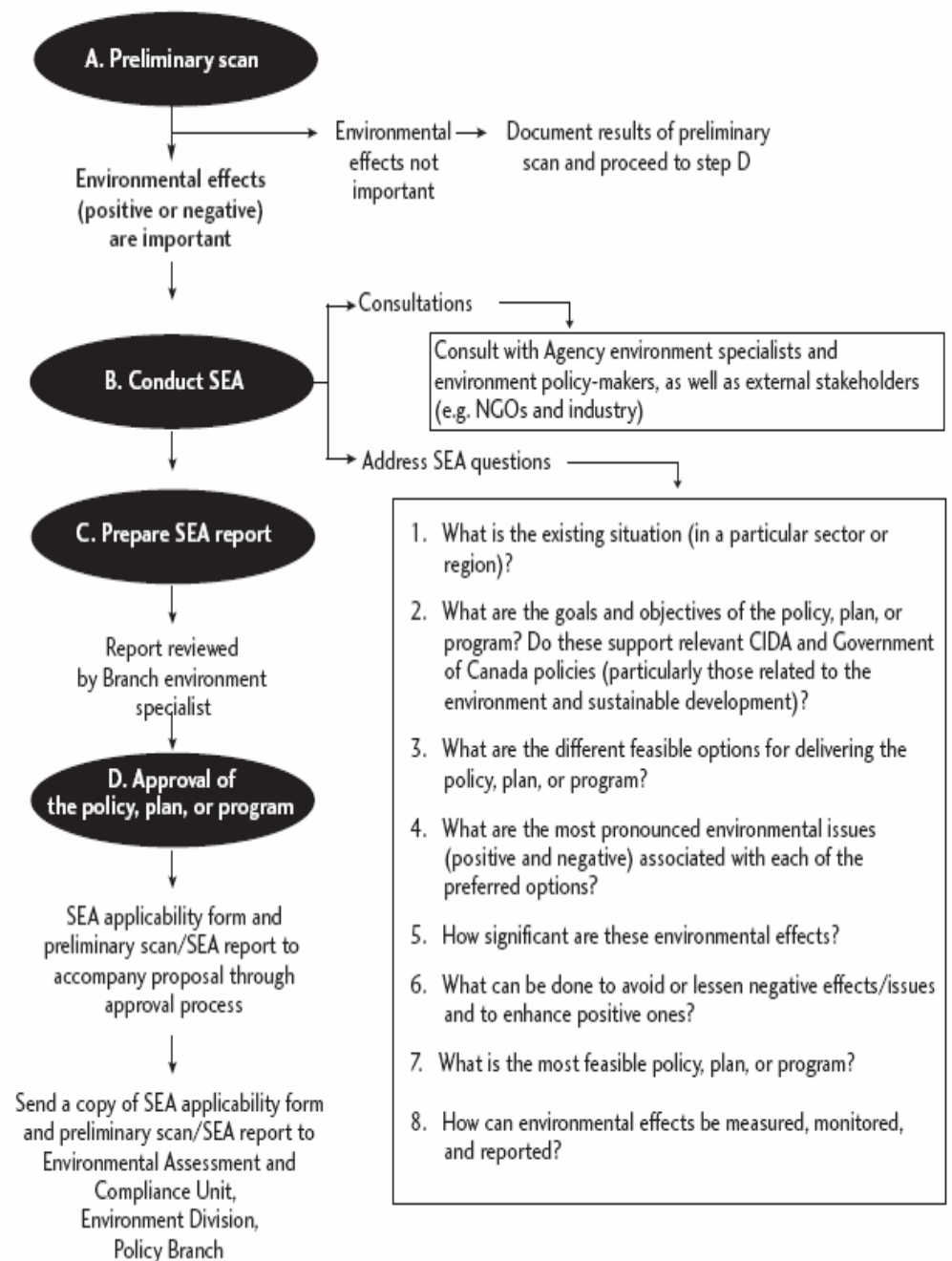
A ‘*preliminary scan*’ is used to quickly determine if a policy, plan or program proposal has potential significant environmental effects⁷ either positive or negative. The conduct of a ‘preliminary scan’ could be considered a diagnostic tool to answer specific questions to determine whether a CIDA initiative is to be subject to an SEA. Figure 5 as lifted from the CIDA SEA Handbook outlines and details the SEA process and identifies specific stages and key questions to be addressed in the conduct of an SEA.

The key questions that can be used to perform a preliminary scan and the checklist for the conduct of an SEA are contained in Annex 2 of this kit.

⁷ Further elaboration of environmental effect, as defined in the Act and Cabinet Directive, is provided by the *CEAA Reference Guide: Determining Whether a Project is Likely to Cause Significant Adverse Environmental Effects*.

Figure 5:

The SEA process at CIDA



3.0 Philippine EIS System as an Alternative to Canadian EA process under Sec. 54(2) of the CEAA

Applicability of local EA systems as alternate EA option under the CEAA.

The CEAA allows for the use of local environmental assessment processes such as the PEIS as an alternative for the Canadian EA process for Canadian government-funded projects implemented in other countries, i.e. CIDA bilateral projects. This flexibility in the application of local EA rules can be used ONLY when Sec 54(2) of the CEAA applies to CIDA projects whose ‘essential project details’ are unknown before a decision to approve funding is reached.⁸

This proviso normally applies to multi-year projects of CIDA for which not all of the essential details of the sub-projects are known at the time of funding. However, CIDA is still legally obliged to ensure, in so far as practicable, that an assessment of environmental effects of the project and any sub-projects is conducted as early as is practicable before irrevocable decisions are made regarding project approval.

Likewise, CIDA should ensure that the recipient organization has the capacity to comply with its obligations. CIDA has also the right (and should do so as appropriate) to ask the recipient organization to provide a copy of the authorization issued by the local authorities and/or a copy of the EA report. It may also require that it be provided with a solicitor’s opinion regarding the appropriateness of the application of the chosen EA process.

Furthermore, when Sec 54(2) applies, and CIDA decides to use the local process or an alternate process, an environmental clause in the contractual document with the recipient organisation⁹ is added to ensure that the required EA is conducted when the essential details of the project become known. Once CIDA decides to do use the local EA process it “renounces” to review the EA, to decide as to the acceptability of the project’s environmental effects and approve the funding

However, when CIDA chooses to use the CEAA, the Agency remain in control of all decision-making with regards to the project.

Once essential details of the projects and sub-projects become known, CIDA **must** ensure that an environmental assessment is conducted. The CEAA endorses three (3) options for the conduct of an EA:

- EA process outlined in the CEAA;
- EA process in effect in the partner country, i.e. Philippine EIS System; and
- Another EA process that is practicable to use under the circumstances (e.g. WB EA process or an EA process specific to the Project).

⁸ Use of a foreign EA process is valid only in cases where essential project details are unknown at the time the PAD is authorized AND CIDA does not have a direct or indirect role in the authorization of the project and/or sub-projects.

⁹ The updated environment clauses can be found on EntreNous under Toolbox/Contracts/Key Documents.



In the case of most CIDA-funded projects in the Philippines, they have been determined to NOT require an EA under the CEAA, as they do not fall under the definition of a ‘project’ under the CEAA¹⁰.

Ensuring environmental sustainability under CEAA and CIDA Policy for Environmental Sustainability

Even if projects are determined to NOT require an EA under the CEAA, it remains the responsibility of CIDA project officers and project implementers/partners to ensure that sub-projects and components of the projects are implemented consistently by ensuring environmental sustainability throughout the project’s life.

Under the CIDA policy for environmental sustainability, CIDA projects must not only maintain that no adverse environmental effects are avoided during its implementation but also increase the capacities of partners to plan and implement development policies, programmes and activities that are sustainable. These include not only the implementation of appropriate mitigation measures, design and development of an appropriate follow-up (i.e. environmental management plan) programme, and compliance with public notice and information requirements but also advocacies and promotion of good environmental practices and processes (e.g. efficient use of water and energy, safe handling of pesticides and fertilisers, waste management and recycling, etc.)

Likewise, should certain sub-projects of CIDA-funded projects fall under the definition of a ‘project’ under the CEAA, such sub-projects should undergo an EA process with an option to follow either the CEAA or local EA process. However, once a specific EA process has been selected, the sub-project must complete that process until it fully satisfies the requirement of that selected EA process.

4.0 What is the EA process under Philippine EIS System?

4.1 EIA for Projects

The EA process in the Philippines is an environmental impact assessment system that is covered under *PD 1586* or the PEIS System and implemented under *DAO 30-2003: EIA Operations Manual*. The Philippine EIA system shares almost similar objectives and processes with the CEAA except for slight differences in its applications¹¹.

¹⁰ The PRIME project, on the other hands, falls under the provision of Sec.54 (2) of the CEAA where “essential project details are not yet known” and is required to conduct an assessment of environmental effects once the essential details are known.

¹¹ In the Philippines, EIS system is applied as a regulatory requirement for development projects that requires proponents to obtain formal ‘certification’ of either coverage or non-coverage whilst in the CEAA, the determination of a development initiative’s coverage is based on a simplified process of self-determination if a project falls under the ‘definition’ of a ‘project’ or ‘undertaking’ under the CEAA.

a. *Determining if a Project is covered under the PEIS?*

Under the Philippine system, the determination of a *project or undertakings* with significant negative environmental impacts that will be covered by an EIS or EA shall be considered based on the following factors:

- The nature of the project and its potential to cause significant negative environmental impacts, and
- The sensitivity or vulnerability of environmental resources in the project area.

The Philippine EIS system covers projects and undertakings categorized as Environmentally Critical Projects (ECPs) and projects located in Environmentally Critical Areas (ECAs). These projects cannot proceed unless DENR issues an Environmental Compliance Certificate (ECC).

b. *Two-level screening process to categorise projects for EIS*

Essentially, DENR uses a two-level screening process to determine the level of coverage of projects or undertakings:

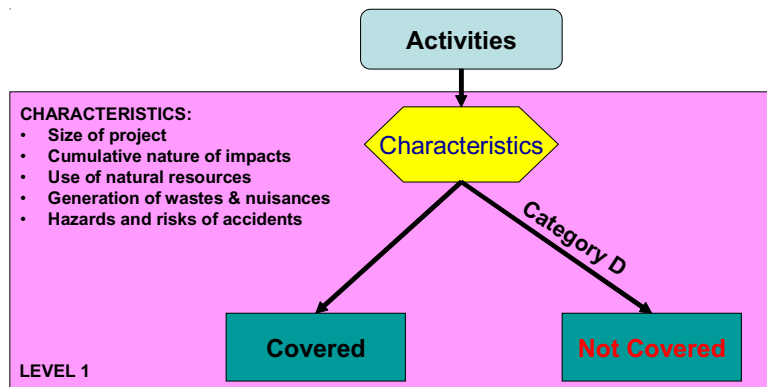
LEVEL 1: *Determining the characteristics of the project or undertaking*

The criteria on “*Characteristics of the Project or Undertaking*” is used to determine if a project or undertaking is “**COVERED**” or “**NOT COVERED**”.

The criteria (Set A) to determine coverage are as follows:

- Size of the project;
- Cumulative nature of impacts vis-à-vis other projects
- Use of natural resources
- Generation of wastes and environmental-related nuisance
- Environment-related hazards and risk of accidents

Figure 6:



Source: DAO30-2003: EIA Operations Manual

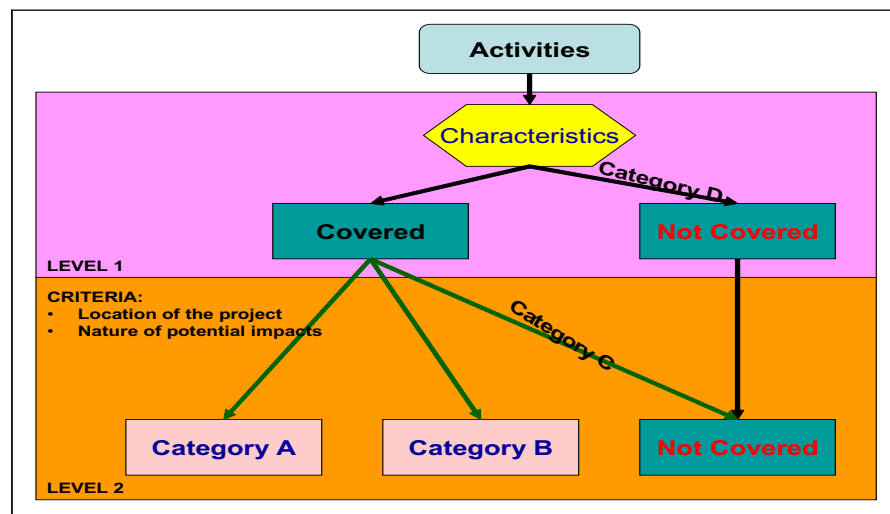
LEVEL 2: Determining the category of a project.

After a project is deemed to be covered, it is then classified using the criteria for location (Set B) and nature of potential impacts (Set C) as “**CATEGORY A**”, “**CATEGORY B**” or “**CATEGORY C**”. (See Table 2: Criteria to Determine Category of a Project)

Table 2: Criteria to Determine Category of a Project

Set B - Location Criteria	Set C - Nature of Potential Impacts/s
<ul style="list-style-type: none"> • Vulnerability of the project area to disturbances due to its ecological importance, endangered or protected status; • Conformity of the proposed project to existing or approved land use; • Relative abundance, quality and regenerative capacity of natural resources in the area, including the impact on absorptive capacity of the environment 	<ul style="list-style-type: none"> • Geographic extent of the impact and size of affected population; • Magnitude and complexity of the impact; • Likelihood, duration, frequency and reversibility of the project

Figure 7:



Source: DAO30-2003: EIA Operations Manual

Based on these operational criteria and procedures, DENR classifies projects or undertakings into the following categories:

- Category A.** Environmentally Critical Projects (ECPs) with significant potential to cause negative environmental impacts.
- Category B.** Projects that are not environmentally critical in nature, but which may cause negative environmental impacts because they are located in environmentally critical areas (ECAs)
- Category C.** Projects intended to directly enhance environmental quality or address existing environmental problems
- Category D.** Projects not falling under other categories OR unlikely to cause adverse environmental impacts

Proponents of co-located or single projects that fall under **Category A** or **Category B** are required to secure an ECC. For co-located projects or projects in economic zones, the proponent has the option to secure a programmatic ECC. Otherwise, each locator-proponent shall be required to secure individual (project-specific) ECCs.

In general, ECC applications for projects under **Category A** or **Category B** shall be based on an EIS or Initial Environmental Examination (IEE) Report, respectively. However, in cases where the IEE Report fails to address all environmental issues or concerns, the application may be upgraded to an EIS Report.

While proponents for projects classified as **Category C** are required to submit *Project Description* for issuance of *Certificate of Non-Coverage*. A **Category D** is considered as outside the purview of the Philippine EIS System, and shall be issued *Certificate of Non-Coverage* or CNC upon request by the proponent. **Table 5** shows the category of projects that are covered under the PEIS system.

4.2 *Programmatic EIA for Industrial Projects*

The Philippine EIS system also has a programmatic EA review process (DAO 2000-05) for industrial development projects that have either multiple stages or components. Projects that fall under the programmatic EA process under DAO 2000-05 are:

- Programs consisting of a series of similar projects, or a project subdivided into several phases and/or stages whether situated in a contiguous area or geographically dispersed, such as energy projects.
- Projects consisting of several components or a cluster of projects co-located in a designated area such as an industrial estate or export processing zone.

These projects are required to submit a programmatic EIS that shall serve as the over-all EIA compliance for individual projects that would later on be part of the project unless individual locators in the project area does not conform to the project areas' original specifications contained in the programmatic EIA. Such locator's projects will have to submit to a separate EIA review.

4.3 *Absence of a Strategic Environmental Assessment (SEA) System*

There is no established Strategic Environmental Assessment (SEA) system for the Philippines similar to the SEA process being followed by CIDA under the *1999 Cabinet Directive on the Environmental Assessment of Policy, Plan and Programme Proposals*. As such, non-infrastructure projects and programmes such as health, education, policy reform or technical assistance/capacity building initiatives do not undergo any form of EA¹².

Projects or undertakings covered under the PEIS are detailed in Annex 3.

¹² Environmental considerations for policy, programme and projects are normally covered by existing environmental safeguards and guidelines applied by donor agencies and partners. Likewise, other forms of EAs for environmental management activities such as toxic and hazardous wastes, solid waste, water and air pollution activities are covered by the specific guidelines and implementing rules mandated laws.



E proposed EA tools in CIDA-Funded projects & sub-projects in the Philippines

1.0 Applying EA tools to CIDA Projects and Sub-projects

Whilst, most of CIDA-supported projects and sub-projects in the Philippines are deemed to not require an environmental assessment under the CEAA as they do not fall under the definition of a “project” under the CEAA, it is still important for CIDA implementing partners and potential beneficiaries to integrate environmental parameters and considerations in the application of TA support and implementation of CIDA project and sub-project components as part of the cross-cutting theme (CCT) for environmental sustainability required for all CIDA-supported projects.

This section presents two types of EA tools: a) pre-application diagnostic tools—environmental diagnostic filter and an environmental impact assessment tool box to assist in determining environmental impacts and risks for their projects and sub-projects at the pre-implementation stage; and, b) environmental analysis tool for regular project monitoring and/or post-project assessment.

2.0 Sample EA Diagnostic Tools and Filters for CIDA Projects and Sub-projects

2.1. Environmental Diagnostic Filters and Tools as Pre-application Screens for CIDA Projects and Sub-Project Technical Assistance and Support

The environmental diagnostic filter (See Table 6a and b) is a pre-application filter/checklist that may be used by CIDA projects and sub-projects to identify possible environmental risks and issues that maybe confronted by potential CIDA project and sub-project beneficiaries seeking assistance from CIDA implementing partners. These filters were drawn and expanded from the filters proposed by the author and adopted by PBSP-CVED for their pre-application forms.

It is intended to serve as a preliminary guide to both CIDA implementing partners and potential beneficiaries in categorizing proposed projects and sub-projects under the Philippine EIS system. It shall also serve as a way to guide potential beneficiaries of potential needs for a more comprehensive EA and compliance with existing environmental laws and guidelines.

Use of pre-application diagnostic filter

The use of the pre-application filters can form part of the application requirements for assistance and support by potential beneficiaries of CIDA projects and sub-projects. The checklist is to be filled-up either by the proponent or by a CIDA project officer. The questions are just a determination of the nature and extent of the project to enable CIDA project and sub-project implementers a quick guide to determine if the proponent needs to comply with existing EIA requirements. It also provides an opportunity for the proponent to determine if he/she would need further assistance to conduct a more thorough environmental diagnosis of the 'project' or 'undertaking' (2nd stage Diagnostics)

Table 3a: Proposed Project and Sub-project Environmental (Pre-application) Diagnostic Checklist

1.0 a. What is the nature of the proponent's 'project' or 'undertaking'?	
<input type="checkbox"/> Physical (<i>Project needs to comply with EIA process</i>) <input type="checkbox"/> Non-physical (<i>Proceed to Question No. 2</i>)	
2.0 a. Where is the project located?	
<input type="checkbox"/> Environmentally-critical area (<i>Please answer Question 2b, Project needs to comply with EIA process</i>) <input type="checkbox"/> Non-environmentally critical area (<i>Proceed to Question No. 3</i>)	
b. If the project is located in an ECA, Please check type of ECA? ¹	
Types of ECAs?	
<input type="checkbox"/> Protected areas, national parks, watershed reserves, wildlife preserves, and sanctuaries	<input type="checkbox"/> Areas with critical slope (50% slope+)
<input type="checkbox"/> Areas set aside as aesthetic, potential tourist spots	<input type="checkbox"/> Areas classified as prime agricultural lands
<input type="checkbox"/> Areas which constitute the habitat for any endangered or threatened species of indigenous Philippine wildlife (flora and fauna)	<input type="checkbox"/> Recharged areas of aquifers
<input type="checkbox"/> Areas of unique historic, archeological, geological, or scientific interests	<input type="checkbox"/> Water bodies
<input type="checkbox"/> Areas which are traditionally occupied by cultural communities or tribes	<input type="checkbox"/> Mangrove Areas
<input type="checkbox"/> Areas frequently visited and or hard-hit by natural calamities (geologic hazards, floods, typhoons, volcanic activity, etc.)	<input type="checkbox"/> Coral Reefs
3.0 What is the status of the proposed activity?	
<input type="checkbox"/> New <input type="checkbox"/> Extension <input type="checkbox"/> Continuing	
4.0 What is the main/core activity of the proposed project or enterprise?	
<input type="checkbox"/> Raw material extraction/utilisation <input type="checkbox"/> Finishing and packaging <input type="checkbox"/> Storage, delivery and transport <input type="checkbox"/> Marketing, financing and sales <input type="checkbox"/> Processing <input type="checkbox"/> Production (manual/semi-mechanised/mechanized)	
5.0 What is the nature of assistance/supported requested?	
<input type="checkbox"/> Financial/funding support <input type="checkbox"/> Policy support/enabling environment <input type="checkbox"/> Technical assistance/expertise <input type="checkbox"/> Events/activities support <input type="checkbox"/> Training/Capacity building assistance	
6.0 Do you want assistance for further environmental diagnosis of your project?	
<input type="checkbox"/> Yes <input type="checkbox"/> No	
7.0 TA recommendation: _____	
¹ ECA definition is based on Section 1.0 (b), Article II of DAO 96-37.	

Table 3b: Other Pre-Application Environmental Diagnostic Filters

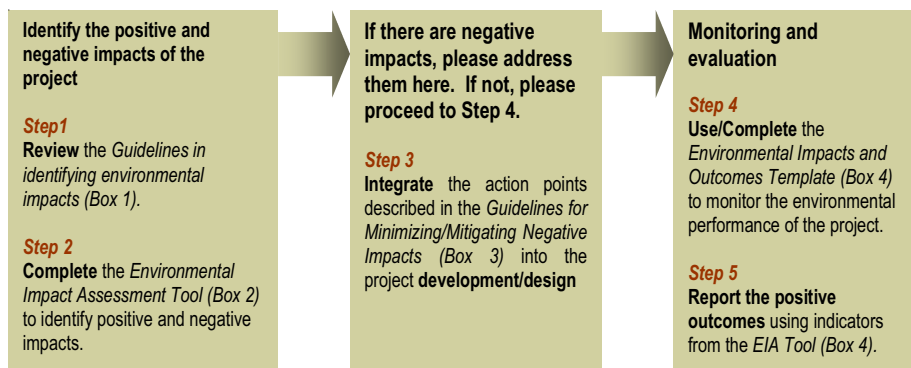
Other Pre-Application Environmental Diagnostic Filters										
1.0 Raw Material and Supplies										
Type	Source/Supplier			Volume/Week (in kgs)	Value (in Pesos)					
	Free/ Self- sourced	Informal	Formal							
<input type="checkbox"/> Natural										
<input type="checkbox"/> Semi-processed										
<input type="checkbox"/> Processed										
2.0 Type of supplies used										
Process	Type of Supplies Used		Source/Supplier			Volume/Week (in kgs)		Value (in Pesos)		
	Non- Chemical	Chemical	Wholesaler	Retailer	Trader	Non- Chemical	Chemical	Non- Chemical	Chemical	
<input type="checkbox"/> Processing/ Production										
<input type="checkbox"/> Finishing										
<input type="checkbox"/> Packaging										
3.0 Type of Utilities Used										
Type	Source/Supplier				Volume/Week	Value (in Pesos)				
	Natural ¹	Deepwell/ Generator	Water District/ Electric Coop	Others ²						
<input type="checkbox"/> Water (in m ³)										
<input type="checkbox"/> Power(in kwh)										
<input type="checkbox"/> Fuel (in liters)										
Note: ¹ - for water: spring water; for energy: solar, wind or other renewable energy sources; ² - for water: delivered; for energy: battery-operated										
4.0 Use of fuel and other energy sources used										
Type	Natural ¹	Source/Supplier			Volume/Week	Value (in Pesos)				
		Petroleum-based					Others ²			
		Gas/ Kerosene	Diesel	LPG						
<input type="checkbox"/> Transport (in liters)										
<input type="checkbox"/> Cooking (in liters or gals)										
<input type="checkbox"/> Production (in liters or gals)										
Note: ¹ Natural - for cooking/production: wood, charcoal/brickets, sawdust, etc. ² Others - for transport: biofuel, ethanol, fuel-mix etc.; for cooking: methane, kerosene, etc.; for production – clinker, etc.										
5.0 Waste Generation, Handling and Disposal System										
Type	Volume/ Week	Disposal System								
		Composted/ Recycled	Septic Tank	Public Drainage/ Garbage Collection	Burned/ Buried/ Self- disposal	Others ¹				
<input type="checkbox"/> Water (in m ³)										
<input type="checkbox"/> Raw material (in kilos/liters)										
<input type="checkbox"/> Finishing materials (in kilos/liters)										
<input type="checkbox"/> Packaging materials (in kilos/liters)										
Note: ¹ Others – waste exchange or sold to junk shops/collectors.										

2.2. Simplified Environmental Assessment Tool Box: 2nd Stage Diagnostic Tool

The proposed environmental impact assessment toolbox is a simplified EA process developed by the CIDA-supported Private Enterprise Partnership Project being implemented by the International Finance Corporation (IFC) - World Bank¹³.

The EIA toolbox may be used by project officers as another ‘diagnostic tool’ but with a more detailed and holistic ‘lens’ used in diagnosing a project’s environmental risks and potentials and integrate it into project design and implementation (see **Figure 8**). This toolbox should be helpful to CIDA project and sub-project officers as a stage 2: diagnostic tool to be applied to potential beneficiaries who have been approved for assistance and support by CIDA projects and sub-projects.

Figure 8. Framework for Integrating Environment, Health and Safety in Project Development¹⁴



Step 1: Identifying negative or positive impacts to the environment

Step 1 has *two key parts*. The first part calls for the identification of potential sources of environmental impacts, either positive or negative, of the project (see Table 4). *Environmental impacts* refer to a specific element of the *project activities* that have either *beneficial or adverse* impact on the environment, particularly on the quality of land/soil, air and water. This may involve emissions (e.g. smokestack, fumes, billows), discharges (e.g. liquid effluents, solid matter or waste), use or reuse of materials (e.g. hazardous) or natural resources (e.g. water, natural gas, forest and aquatic products), or noise.

¹³ This toolbox was taken from the PEP-Philippines General Environmental Guidelines for Program Managers to integrate the environmental guidelines into the design and implementation of PEP-Philippines’ projects

¹⁴ US-EPA. Manual for Developing Environmental Management System (EMS) Program (Cause and Effect). United States Environmental Protection Agency (EPA). www.epa.gov

Table 4. Guidelines in *Identifying* Environmental Impacts positive and negative)

Part 1. Identify Sources of (—) or (+) Impacts	Part 2. Identify Actual Impacts
<p><i>Water usage</i> Ascertain the amount (volume) of water needed by the project activities and assess current supply.</p>	<ul style="list-style-type: none"> ▪ Determine how the use of water impacts the sustainability of the resource. Ensure that the project will not compromise or compete with the community’s demand for water. ▪ Identify areas where the project could enhance water quality or protect water sources (e.g. watershed, buffer zones, spring water sources)
<p><i>Energy usage</i> Find out the amount of energy needed in the various project activities.</p>	<ul style="list-style-type: none"> ▪ Identify measures, strategies, technologies that will help conserve energy usage and describe their positive impacts on the environment ▪ Look for opportunities to use renewable sources of energy
<p><i>Use of chemicals and hazardous materials</i> Identify chemicals that will be used in the processes and understand their components as well as the potential levels of hazard to people and the environment.</p>	<ul style="list-style-type: none"> ▪ Identify short- as well as long-term effects of the chemicals both to the environment and to human beings. ▪ Identify non-toxic alternatives and describe their positive impacts on worker’s health and safety as well as on the environment.
<p><i>Water discharges</i> Determine the quality and contents of wastewater and understand the routes of the drainage system.</p>	<ul style="list-style-type: none"> ▪ Determine the effects of wastewater to the quality of the water system (e.g. rivers, creeks or lakes), the people and local biodiversity.
<p><i>Spillage</i> Identify the project site areas or processes where there is high potential for spills and leaks of hazardous or polluting materials</p>	<ul style="list-style-type: none"> ▪ Identify all possible effects and impacts on the environment and public health. ▪ Identify the safest transportation route and require suppliers to comply with internationally accepted safety practices to avoid and mitigate potential accidents.
<p><i>Liquid waste</i> Identify the types and composition of liquid wastes. Understand the quality, quantity and source or location of all liquid effluents in the process.</p>	<ul style="list-style-type: none"> ▪ Determine the impact of liquid effluents on surface and ground water quality. ▪ Identify processes to re-use waste water and describe their potential impact on the environment and/or potential cost-savings.
<p><i>Solid wastes</i> Identify all types of solid waste generated from the project activity. Identify disposable materials which can be reused/recycled to minimize waste.</p>	<ul style="list-style-type: none"> ▪ Determine impacts or benefits from waste generated. Some waste, particularly solid components have positive effects to the business processes such as cost savings when raw materials and bi-products are recycled and re-used. Negative effects to the environment and people happen when waste is not disposed of properly. Solid waste may also involve hazardous materials thus correct disposal is critical.
<p><i>Air emissions</i> Identify the sources and quality of emissions.</p>	<ul style="list-style-type: none"> ▪ Determine the impact of project activities on air quality. Impacts may include adverse effects on the health of workers and the local community.
<p><i>Ambient sources</i> Identify the sources of noise (sound) and extreme temperature (cold and hot). The two main concerns are: ambient environment involving extremes temperature in the processes; and, noise generated by the project activity.</p>	<ul style="list-style-type: none"> ▪ Determine the effects on health of workers, the local community, flora and fauna.

Note: Mitigating factors are adopted from IFC’s EHS General Guidelines.

Source: PEP-Philippines General Environmental Guidelines for Program Managers

The second part provides guiding points on how to identify or determine the actual *changes or effects* that take place in the environment, whether *adverse or beneficial*, as a result of the project's activities, products or services.

Step 2: Accomplishing the environmental impact assessment tool

In Step 2, the user is asked to use *Table 5* to *identify* the specific (quantitative) potential environmental impacts of a project.

Table 5. Environmental Impact Assessment Tool

Identify the sources of impacts (positive or negative)	Potential Environmental Impacts Identification
Water usage: 1. e.g. 10 tons of water used in equipment cleaning per week 2.	Determine effects (positive or negative) of water use 1. e.g. 10 tons of water polluted by oil and other chemicals and materials per week. 2.
Energy Usage: 1. 2.	Determine the effects (positive or negative) of energy or alternative energy use 1. 2.
Use of Chemicals and Hazardous Materials: 1. 2.	Identify impacts of chemical use on workers and community 1. 2.
Water Discharges: 1. 2.	Determine the effect of discharges 1. 2.
Spillage: 1. 2.	Identify effects and impacts of possible spillage 1. 2.
Liquid Waste: 1. 2.	Determine impacts on surface and ground water quality 1. 2.
Solid Wastes: 1. 2.	Determine impacts or benefits from waste generated from the project activities, products and services 1. 2.
Air Emissions: 1. 2.	Determine the impact on air quality 1. 2.
Ambient: 1.	Determine impacts on humans, animals and plants 1.

Source: PEP-Philippines General Environmental Guidelines for Program Managers

Step 3: Minimizing and Mitigating Negative Environmental Impacts

Having identified the potential environmental issues of the project in *Table 5*, *Table 6* is a tool to assist the user to ascertain the relevance of these issues. Such relevance can be prioritised in terms of the scale or weights of the potential hazards poised by the issue, i.e. 0-3.¹⁵

If an issue is deemed relevant, the user will need to develop strategies and action points to manage these environmental issues and integrate them into the project design. All relevant issues must be integrated into the project design. Specific strategies must be developed to ensure that potential negative impacts are avoided, reduced or mitigated. If the user is unsure, additional research must be carried out or experts consulted to provide clarity.

¹⁵ The hazards can be based on the following scale:

- 0 - means this hazard does not adversely affect your community. This is a no-risk hazard.
- 1 - means this hazard adversely affects a few members of the community but causes insignificant harm. This is a low-risk hazard.
- 2 - means that this hazard adversely affect some members of the community. This is a medium-risk hazard.
- 3 - means that this hazard poises a significant risk to most members of the community. This is a high-risk hazard.

Table 6. Guidelines for Minimizing/Mitigating Negative Impacts

Elements	Potential Action Points (for specific projects, it may be necessary to include additional action points)	Relevant/ Irrelevant	Technical Assistance Needed/Required
Water usage	<ul style="list-style-type: none"> ▪ PMs should integrate into the project design measures or strategies (including technologies) to minimize the use of water e.g. reuse and recycling ▪ Consider strategies that will ensure the sustainability of the resource such as help develop or maintain watershed areas and buffer zones 		
Energy Usage	<ul style="list-style-type: none"> ▪ Adopt an environmental management system (EMS) to increase efficiency in the project's processes (note: there are many resources available on how to establish an EMS system) ▪ Adopt energy efficient processes to conserve energy and increase efficiency 		
Use of chemicals and hazardous materials/ substance	<ul style="list-style-type: none"> ▪ Reduce the use of hazardous chemicals to minimize adverse impact on the environment, to workers and the local community ▪ Train people on the proper use of the chemical products to prevent accidents ▪ Communicate the effects of the chemicals to both internal and external audiences ▪ Implement hazardous material management procedures (this involves the full cycle of risk assessment, identification of hazardous materials, analysis of potential spills, monitoring and reporting) 		
Water discharges	<ul style="list-style-type: none"> ▪ Adopt water use efficiency to reduce the amount of wastewater ▪ Design/integrate wastewater treatment at the source 		
Spillage	<ul style="list-style-type: none"> ▪ Develop and implement an emergency preparedness program for internal and external use ▪ Develop and implement health and safety measures in the workplace and in the community ▪ Develop a route management plan for transportation of hazardous materials (if any) and educate the public on the potential negative effects of hazardous materials 		
Liquid waste	<ul style="list-style-type: none"> ▪ Develop proper disposal of liquid waste e.g. use sanitary sewer or septic system ▪ Use acceptable standards and technologies to prevent contamination of ground water, soil and water system 		

Elements	Potential Action Points (for specific projects, it may be necessary to include additional action points)	Relevant/ Irrelevant	Technical Assistance Needed/Required
Solid waste	<ul style="list-style-type: none"> ▪ Establish a waste management plan and set priorities based on a clear understanding of potential impacts to health and environment ▪ Avoid or minimize the generation of solid waste through various means such as recycling and reuse and waste minimization, etc. ▪ When waste generation cannot be avoided, always design a plan to minimize, recover, treat, destroy and/or dispose of the waste in an environmentally sound manner (note that Philippine Clean Air Act prohibits incineration of solid waste) ▪ PMs may need experts to help design or develop the plan/ strategies 		
Air Emission	<ul style="list-style-type: none"> ▪ Ensure that emissions will not exceed relevant ambient quality guidelines and standards. Please refer to national legislated standards (e.g. clean air act, ambient air quality standards, guidelines for NO₂/SO₂ emissions), or other internationally recognized standards in the absence of nationally legislated standards. Adopt efficient use of energy as it is one of the most effective ways to minimize emissions ▪ Study how the project can be modified to allow use of alternative sources of energy which will result in less pollution 		

Step 4: Monitoring and evaluation of environmental impacts

Implementation of the guidelines must be monitored regularly. The *Environmental Impacts and Outcomes Template* (Table 7) outlines possible environmental impact indicators and outcomes that can be applied for projects.

In this section for M&E, it would be good to know the specific targets, i.e. reduction in water usage or diversion of usage that the programme aims to achieve over the project period or specific annual work plan period. In this way, the M&E outcome and impact indicators will be more quantifiable and programmable. A target timetable (i.e. immediate, intermediate or long-term/ within a year, 1-3 years, etc) will also be helpful to provide a clear timetable for reckoning deliverables and targets.

Experiences by CIDA-supported projects on private sector development (PSD) showed other socio-economic and health outcomes that were achieved as a result of specific environment-related actions, i.e. improved sanitation, labour productivity, lesser number of sickness or illnesses/down time for employees, additional health insurance/hospital/medicinal expenses for employees or the firm, etc.

Table 7. Environmental Impacts and Outcomes Template

Elements	Outcomes	M&E indicators	Areas for Improvement
Water usage	<ul style="list-style-type: none"> Effective strategies and sustainable mechanisms are developed to minimize the use of water 	<ul style="list-style-type: none"> Cost savings Zero complaints from the stakeholders against unsustainable use of water 	
Energy Usage	<ul style="list-style-type: none"> Effective environmental management system (EMS) 	<ul style="list-style-type: none"> EMS system is in place Cost reduction or cost savings due to energy efficiency measures 	
Use of hazardous chemicals	<ul style="list-style-type: none"> Reduced and/or minimized use of hazardous chemicals in the project implementation processes Effective training course on the proper use of chemical products Effective health and safety communication program 	<ul style="list-style-type: none"> Number of training programs on the proper use of the chemical products conducted Zero accidents or loss of productivity Number of reported accident related to the improper use of chemicals Number of workers attended the training % of employees rating the course $\geq 4 / 5$ 	
Water discharges	<ul style="list-style-type: none"> Effective water use efficiency program Effective wastewater treatment (or other alternative technology) at the source 	<ul style="list-style-type: none"> Zero complaints Compliant to water quality standards 	
Spillage	<ul style="list-style-type: none"> Effectively implementation of emergency preparedness program in the workplace and in the community Effective safe route management plan for transport of hazardous materials 	<ul style="list-style-type: none"> Emergency preparedness training program for internal and external audiences completed Number of trainings conducted Number of community representatives attended the training % of attendees rated the course $\geq 4 / 5$ Route management plan for transport of hazardous materials is in place 	
Liquid waste	<ul style="list-style-type: none"> Effective liquid waste disposal system Prevention of negative impacts e.g. contamination of soil, water system 	<ul style="list-style-type: none"> Liquid waste disposal system is in place 	
Solid waste	<ul style="list-style-type: none"> Effective waste management program Avoided or minimized generation of solid waste through recycling and reuse of waste materials 	<ul style="list-style-type: none"> Solid waste management and waste minimization programs are in place Cost savings from waste recycling initiatives Income generated from waste 	
Air emission	<ul style="list-style-type: none"> Efficient use of energy 	<ul style="list-style-type: none"> Cost savings Certification of compliance (to air quality standards) from DENR or local government Zero reports of upper respiratory illnesses either from the community or from the workers due to project emissions. 	



Step 5: Reporting

Following is a four-step approach to highlight positive outcomes:

- **DEFINE and MEASURE the positive results.** Step 4 is a key tool for this Step, as it defines the specific outcomes of the project, both positive and negative. The outcomes will serve as the measure of the effectiveness of the strategies developed and implemented.
- **DOCUMENT and REPORT back to stakeholders.** Document and discuss the positive impacts or results and the lessons learned from the program. Use all available (and appropriate) media to communicate the positive results: newsletters, press releases, radio, television interviews, annual reports etc.
- **DISSEMINATE and REPLICATE.** Disseminate the lessons learned and explore possibilities to replicate the approaches in other projects.
- **MONITOR and EVALUATE.** Use the *Indicators (Table 5)* to measure and evaluate the results and impacts of the projects on the environment and identify areas to be continued in order to sustain the project's positive impacts

3.0 Sample Environmental Assessment (EA) Tool for Project Monitoring and Post-Project Evaluation

Another environmental assessment tool is presented in this resource book for application by CIDA Projects and sub-projects during project implementation and post-project assessment. It is an assessment monitoring tool to identify specific environmental commitments, issues, risks and mitigating measures faced and addressed by projects and assists in identifying impacts and effects of any activities, particularly physical projects, conducted by a project that may have environmental effects or where affected by environmental conditions.

Box 3 is sample environmental assessment tool developed for Canada Fund grant recipients to provide a checklist-type form of EA that can be used by grantees to self-evaluate their own compliance to environmental sustainability and criteria required under the CEAA and local environmental laws. Several other templates for specific sub-project types on water/sanitation, health and education, agriculture and industry are included in the Annexes as additional references.

Box 3: Sample Environmental Assessment Tool during Project Monitoring or Post-Project Assessment.

SECTOR: GENERAL ENVIRONMENTAL PROTECTION

Date Prepared: _____

PART A: BASIC PROJECT INFORMATION

Project Code: _____
Project Title: _____
Organization: _____
Location: _____
Primary Undertaking: _____

Project Start-up Date: _____
Overall Project Status (*pls check*): Ongoing Completed on _____
(date)

Purpose of the Project:
• _____
• _____

Contact Person: _____
Position in the Organization: _____
Name of Organization: _____
Mailing Address: _____

Tel. No. (include area code) and/or Cellphone No.: _____
E-mail address: _____

Person filling up this form: _____
Position in the Organization: _____
Name of Organization: _____

PART B: ENVIRONMENTAL REQUIREMENTS

1. Did the organization secure a permit or certificate from any of the agencies below?
 None
 LGU (*e.g., Mayor's Permit, Building Permit, Locational Clearance, etc.*)
 - a. Permit/Certificate: _____
Date Secured _____ Validity Date _____
 - b. Permit/Certificate: _____
Date Secured _____ Validity Date _____



DENR/ PENRO/ CENRO (e.g., Certificate of Non-Coverage, Environmental Compliance Certificate, Land Use Permit, Tree-Cutting Permit, etc.)

a. Permit/Certificate: _____
Date Secured _____ Validity Date _____

b. Permit/Certificate: _____
Date Secured _____ Validity Date _____

DOH (e.g., Sanitary Permit)

a. Permit/Certificate: _____
Date Secured _____ Validity Date _____

b. Permit/Certificate: _____
Date Secured _____ Validity Date _____

Water Resources Board (e.g., Water Use/Rights Permit)

a. Permit/Certificate: _____
Date Secured _____ Validity Date _____

b. Permit/Certificate: _____
Date Secured _____ Validity Date _____

Others

a. Permit/Certificate: _____
Date Secured _____ Validity Date _____

b. Permit/Certificate: _____
Date Secured _____ Validity Date _____

** Please attach a photocopy of each permit or certificate secured.*

2. How did you learn of the needed permit or certificate?

Already aware of permit /certificate requirement thus applied for it

Informed or required by Canada Fund personnel

Informed by the concerned agency before project start-up

Informed by the concerned agency during project implementation

Learned of the requirement from others, who? _____

Others _____

3. Did you have difficulty in securing the permit or certificate? Yes No
Why? _____

4. Who prepared the permit requirements and processed it with the concerned agency?

Member of the organization
Name _____ Position _____

Asked help from others
Name _____ Position _____
Organization or Office _____

5. Are all the conditions or provisions written in the permit/ certificate easy to implement?

- Not applicable
- Yes, all conditions/ provisions were implemented with minor or no problems
- No, we encountered some difficulty

Why was it difficult to implement?

- Not applicable for small scale projects
- Too expensive
- Lack of resources (manpower, materials, equipment) to implement it
- Need technical assistance to implement it
- Lack of cooperation among members of organization
- Others, pls identify _____

PART C: ENVIRONMENTAL ASSESSMENT

I. PROJECT DESCRIPTION

A. Please check the status of the following project components:

1. Mangrove rehabilitation, ___ hectares
 Completed Ongoing Not yet implemented Abandoned
2. Reforestation with _____(type)_____ trees
 Completed Ongoing Not yet implemented Abandoned
3. Slope stabilization using _____
 Completed Ongoing Not yet implemented Abandoned
4. Sanctuary for _____
 Completed Ongoing Not yet implemented Abandoned
5. Additional Livelihood on _____
 Completed Ongoing Not yet implemented Abandoned
6. Training on _____
 Completed Ongoing Not yet implemented Abandoned
7. Others: _____
 Completed Ongoing Not yet implemented Abandoned

B. What is the natural resource which is subject of the protection?

C. Please list down the types of livelihood projects and provide details

D. Is there currently any additional component of the project which is not part of the original proposal/ design? Yes No

If Yes, please indicate the additional component and its status _____

E. Land Use/ Classification

What is the classification of the land where the project will be implemented?

- ____ National Park (*indicate name*)
- ____ Natural Park (*indicate name*)
- Timber Land or Public land
- Private (Alienable & Disposable)
- Ancestral Domain (IP area)
- Others _____

II. ENVIRONMENTAL EFFECTS AND PUBLIC CONCERNS

Environmental Effects of the Project

Please update and check which environmental and socio-economic effects (stated in your Project Approval Document) have occurred?

1. “(*state environmental effect from EASR*) _____”

- Did not yet occur
- Yes, it occurred as predicted. Describe _____
- Yes, it occurred but resulted in different effect. State what happened _____

2. Since the project is for environmental protection, what positive affects have been observed on the (marine, aquatic or land) resources, as applicable?

- Effect did not yet occur but results are expected to start after __years/ months due to _____
- Yes, indications on improvement have started to show after ____ months/ yrs, please check and underline applicable items
 - Observed an Increase in stocks of fish, other marine organisms
Describe _____
 - Increase in fish catch by the community by ____ kilos
Describe _____
 - Maintained coral resources and increased fish biomass and species diversity of the marine sanctuary. Describe _____
 - Destructive fishing activities have been reduced
Describe _____
 - The community members themselves are advocating for the island’s protection. Describe _____
 - Observed reduction in soil erosion and soil stability
Describe _____
 - Maintained vegetation cover
Describe _____
 - Reduced destructive activities on natural resources
Describe _____
 - Others _____
Describe _____



- Yes, the effects occurred but resulted in a different outcome. State what happened _____
 - a. Increase in awareness and interest of community in guarding, preserving/ developing their (marine, aquatic, land) resources
 - Did not yet occur
 - Yes, it occurred as predicted. Describe _____
 - Yes, it occurred but resulted in different effect. State what happened _____
 - b. “No environmental effects” cited in the EASR
 - c. Positive effects as follows: _____
3. Did you undertake the following measures required by CIDA?
- a. “(cite from CIDA review) _____”
 - Yes, this has been undertaken
Did it reduce the environmental impact?
 Yes No, describe _____
 - Not yet, why? _____
4. What additional measures did you implement in the course of the project?
- a. What were other additional safety and mitigation measures undertaken during implementation of the project?
 - a. _____
 - b. _____
- What caused you to implement these? _____
5. Did the project cause other unexpected effects as stated below?

PHYSICAL ALTERATION

- Digging or excavation No Yes, how much excess soil? _____
Where was it disposed? _____
- Soil erosion No Yes, minimal or severe? _____
- Landslide No Yes, minimal or severe damage? _____
- Change of scenery No Yes, what scenery was affected? _____

- Cutting of trees No Yes, how many & what kind? _____
- Removal of natural vegetation No Yes, what kind? _____
- Extraction of fishery resources No Yes, what resources? _____
- Extraction of forestry resources No Yes, what resources? _____
- Depletion of agricultural land No Yes, what resources? _____
- Conflict in land use No Yes, how? _____
- Over harvesting of resources No Yes, what & how? _____
- Increased dependence on natural resources No Yes, what & how? _____

WATER RESOURCES

- Involves disposal of pesticides? No Yes, where to? _____
- Involves disposal of sewage? No Yes, where to? _____
- Involves disposal of excess fertilizer? No Yes, where to? _____
- Involves disposal of processing waste? No Yes, where to? _____
- Involves disposal of livestock waste? No Yes, where to? _____
- Pollution of nearby river/ water body No Yes, how? _____

AIR QUALITY

- Noise generation at workplace No Yes, describe _____
- Noise generation at community No Yes, describe _____
- Odor generation at project area No Yes, describe _____
- Odor generation at community No Yes, describe _____

HEALTH

- Increase in incidences of community illness No Yes, what kind? _____
If Yes, what caused it? _____
- Improved sanitation of community No Yes, how? _____
- Improved health facilities of community No Yes

SOCIO-ECONOMIC CONDITIONS

- Increase in income of members No Yes
- Increase in involvement of women No Yes, how? _____
- Increase in access to basic services No Yes, what kind? _____
- Improved living conditions of community No Yes, describe _____
- Increase in community members to avail of new service/ facility
 No Yes, how many? _____
- Attracted new members in organization No Yes, how many? _____
- Improved access to basic services No Yes, what kind? _____

Effect of the Environment on the Project

1. Were there unexpected effects of natural occurrences /phenomenon on the project, as follows?

Natural events (climatic conditions, typhoon, flood, etc) and conditions (poor soil or water condition) affecting the (marine, aquatic, land) resources?

- No effect
- Yes, what natural event affected the Project? _____
Describe what happened _____

Others _____
Describe what happened _____

Cumulative or Interactive Environmental Effects

Please indicate if any of the following effects have occurred.

1. Overall improvement and conservation of the (marine, aquatic, or land) resources or reduced pressure on these resources
 Yes, this has already been observed
If Yes, please describe _____

 Not yet, why? _____
2. “No cumulative or interactive environmental effects” cited in the EASR

Public Concerns/ Participation

1. Have there been any public complaints/concerns since the start of the project?
 No
 Yes, what are these? _____

How were these addressed? _____
2. Has the community or other groups indicated their appreciation for the good effects or benefits of the project?
 No
 Yes, what are these? _____

III. MITIGATION MEASURES

A. Did you undertake the following measures (as indicated in your EASR, and/or End-of-Project Report)?

1. “*(state environmental effect from EASR)* _____”
 Did not yet occur
 Yes, it occurred as predicted. Describe _____

 Yes, it occurred but resulted in different effect. State what happened _____
2. “*(state environmental effect from EASR)* _____”
 Did not yet occur
 Yes, it occurred as predicted. Describe _____

 Yes, it occurred but resulted in different effect. State what happened _____
3. Have seminars or information /awareness campaigns been conducted with the members and the community? Yes No



If Yes, what seminars have been conducted so far? Please list below

What other seminars do you intend to conduct? Please list below.

B. Did you undertake the following measures required by CIDA?

1. “*(cite from CIDA review)* _____”

Yes, this has been undertaken

Did it reduce the environmental impact?

Yes No, describe _____

Not yet, why? _____

2. “*(cite from CIDA Environment Specialist Review)* _____”

Yes, this has been undertaken

Did it reduce the environmental impact?

Yes No, describe _____

Not yet, why? _____

Additional Measures

1. Management of excess materials/ waste, if applicable

How do you manage your waste /excess materials?

buried under the ground

thrown into the river

thrown into drainage

sold to local buyers

Recycled as _____

Others _____

Not Applicable

Not yet, why? _____

If no, when will this be done? _____

What caused you to implement these? _____

Were these effective in reducing the negative effects?

Yes No, why not? _____

2. Are there are other related problems causing the exploitation of (marine, aquatic, land) resources? Yes No



If Yes: In order to help achieve the objectives of (coastal resource management, environmental protection), are there plans or initiatives to solve these problems on the following?

- a. Improper waste management
 - Yes. Our plans are as follows _____
 - _____
 - Yes but this will be addressed by other groups, namely _____
 - No plans. Not covered by this project
- b. Siltation /erosion caused by absence of vegetation or due to agricultural practices
 - Yes. Our plans are as follows _____
 - Yes but this will be addressed by other groups, namely _____
 - No plans. Not covered by this project
- c. Illegal (forest , fishing) activities _____
 - Yes. Our plans are as follows _____
 - _____
 - Yes but this will be addressed by other groups, namely _____
 - No plans. Not covered by this project.
- d. Over extraction/ utilization or unsustainable use of natural resources
 - Yes. Our plans are as follows _____
 - _____
 - Yes but this will be addressed by other groups, namely _____
 - No plans. Not covered by this project.
- e. Are there policies/guidelines made available to the community or farmers for these related problems above?
 - No
 - Yes, please list what the policies/guidelines are for: _____

If Yes, what particular policy is difficult to implement? _____

- f. Why is it difficult to implement?
 - Not applicable for the project
 - Too expensive
 - Lack of resources (manpower, materials, equipment) to implement it
 - Need technical assistance to implement it
 - Lack of cooperation among members of organization
 - Others, please identify _____

What are you doing to address the problem? _____



g. What were other additional mitigation measures undertaken during implementation of the project?

a. _____

b. _____

What caused you to implement these? _____

Were these effective in reducing the negative effects?

Yes No, why not? _____

D. Was there any difficulty encountered in accomplishing any or all mitigation measures?

Yes No

If Yes, what particular measure was difficult? _____

If Yes, why was it difficult to implement?

Not applicable for small scale projects

Too expensive

Lack of resources (manpower, materials, equipment) to implement it

Need technical assistance to implement it

Lack of cooperation among members of organization

Others, please identify _____

IV. FOLLOW-UP PROGRAM

1. Monitoring of compliance with mitigation measures committed and recommended for the project

Completed. Co-terminus with the project completion.

Were the guidelines complied with? Yes No, why not? _____

Continuing Activity even after completion of the project

What is the schedule for implementation? _____

Was this difficult to implement? Yes No

If Yes, Why? _____

2. *“(Cite from EASR, Progress reports submitted to CIDA)”* _____

Completed. Co-terminus with project implementation

What are the results? _____

Continuing activity

What is the schedule for implementation? _____

Was this difficult to implement? Yes No

If Yes, Why? _____

3. Have you encountered negative attitudes/values and lack of internalization on organizational development, and environmental and resource management?
 Yes No

If Yes, what are your follow-up plans or initiatives to address the above hindering factors in meeting your project objectives of environmental protection or coastal resource management?

- No plans as of now
 Additional awareness /education seminars
 Additional consultations with members on their expectations
 Additional incentives such as _____
 Others, please identify _____

What difficulties do you anticipate in implementing this?

- Lack of manpower to do the monitoring
 Lack of technical skills
 Lack of motivation or advocacy on the partners to continue the program
 Others _____

4. Are there plans or initiatives to consider follow-up on the following?
 a. Monitoring on the reduced rate of illegal fishing /forestry activities or activities that will lead to damage of the marine /forest resources?

- Completed. Co-terminus with the project completion. Results are as follows _____

Was this difficult to implement? Yes No
 If Yes, Why? _____

- Yes we intend to monitor this through time to assess if the program has attained its objective. The schedule of implementation is _____
 No, why not? _____

- b. Monitoring of the survival and protection of the mangrove (and the subsequent improvement of the fish breeding area as well as protection of the coral reef from siltation) or protection of forest and subsequent reduction in soil erosion?

- Completed. Co-terminus with the project completion. Results are as follows _____

Was this difficult to implement? Yes No
 If Yes, Why? _____

- Yes we intend to monitor this through time to assess if the program has attained its objective. The schedule of implementation is _____
 No, why not? _____

5. Do you think other follow-up programs should be undertaken?

Yes No, why not ? _____

If Yes, what should it include? _____

V. EA SCREENING REPORT COMPLIANCE

1. Did you prepare the EA Screening Report?

Yes No

If no, who did it? _____

Name of preparer: _____

Position: _____

Name of Organization: _____

2. Was it easy to prepare the EA Screening Report?

Yes No

If not, what were your difficulties? _____

3. Did the EA Screening Report help you in implementing the project?

Yes No

If not, why? _____

VI. REMARKS/ OTHER INFORMATION:

** Thank you for taking time to provide information ***

Refer to Annex 1b for other sector templates



4.0 Other relevant EA tools for CIDA Projects and sub-projects

Other EA tools are also available to strengthen environmental management and sustainability of projects which may be applicable and relevant to some CIDA projects and sub-projects. These EA tools are subsequent techniques that can be used by specific projects for specific purposes intended to improve over-all environmental management performance and business bottom lines. These include the following:

- Life-cycle Analysis
- Clean Production System
- Environmental Risk Assessment
- Environmental Cost Accounting/Auditing

a. *Life-cycle management and analysis* (See Annex 5a for further information)

LCM is the application of life cycle thinking to modern business practice, with the aim to manage the total life cycle of an organization's products and services towards more sustainable consumption and production. LCM is about systematic integration product sustainability e.g. in company strategy and planning, product design and development, purchasing decisions and communication programs.

LCM is not a single tool or methodology but a flexible integrated management framework of concepts, techniques and procedures incorporating environmental, economic, and social aspects of products, processes and organizations. It is voluntary and can be gradually adapted to the specific needs and characteristics of individual organizations.

b. *Clean production and design for environment system* (See Annex 5b for further information)

Cleaner Production (CP) is defined as the continuous application of an integrated preventive environmental strategy applied to processes, products and services to increase overall efficiency, and reduce risks to humans and the environment. CP can be applied to the processes used in any industry, to products themselves and to various services provided in society. CP's benefits to enterprises and businesses are:

- Encourages continuous application
- Is not limited only to manufacturing industries or businesses of a certain type or size;
- Does not deny or impede growth but insists that growth can be ecologically sustainable;
- Considers life cycle impacts of producing goods and providing services;
- Includes health and safety and emphasizes risk reduction;
- Improves immediate efficiency as well as long term efficacy;
- Win-Win-Win situation – for environment, community and business



c. *Environmental Risk Assessment*

Environmental Risk Analysis (ERA) is an approach and a set of tools for systematically comparing the social, economic, human health and other environmental costs and benefits of decision options. ERA includes problem definition, hazard and exposure assessment, risk characterization, risk communication and decisions affecting risk management.

ERA can add transparency and inclusiveness to the decision-making process. It is an integrative and multi-disciplinary, drawing on a range of basic scientific skills to generate data, and a wide array of other skills to communicate, evaluate, interpret, and act on the assessment.

d. *Environmental Management (Cost) Accounting/Auditing*

EMA can be defined as the identification, collection, estimation, analysis, internal reporting, and use of materials and energy flow information, environmental cost information, and other cost information for both conventional and environmental decision-making within an organization. Among the significant features of EMA are:

- EMA focuses on costs internal to the company; EMA does not include external costs to individuals, society, or the environment for which a company is not legally held responsible.
- EMA places particular emphasis on accounting for environmental costs.
- EMA encompasses not only environmental and other cost information, but also explicit information on physical flows and fates of materials and energy.
- EMA information can be used for most types of management activity or decision-making within an organization, but is particularly useful for proactive environmental management activities.

Thus EMA incorporates and integrates two of the three building blocks of sustainable development - environment and economics - as they relate to an organization's internal decision-making. 🌱