# FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA

# MINISTRY OF ENVIRONMENT FOREST AND CLIMATE CHANGE

# *Environmental and Social Impact Assessments*

# *Guidelines*

**Final Draft**

***July 2017***

# Contents

**Acronyms and abbreviations** ..... iii

**Glossary and definitions** ..... v

**PREFACE** ..... xiii

**1. INTRODUCTION** ..... 1

1.1. Introduction ..... 1

1.2. Policy and Legal context ..... 1

1.3. Core values of ESIA ..... 4

1.4. Guiding principles of ESIA ..... 4

1.5. Benefits of ESIA ..... 5

**2. ROLES AND RESPONSIBILITIES OF ESIA STAKEHOLDERS** ..... 7

2.1. Federal Environmental Agency ..... 7

2.2. Regional environmental agencies (REA) ..... 8

2.3. Delegated Sectoral Institutions (DSI) ..... 9

2.4. Licensing Agency (LA) ..... 9

2.5. Proponent ..... 10

2.6. A Consulting firm ..... 11

2.7. Interested and Affected Parties (IAPs) ..... 12

**3. THE ESIA PROCESS** ..... 13

3.1. Pre-screening consultation ..... 13

3.2. Screening ..... 14

3.2.1. Project Registration ..... 14

3.2.2. Screening Methodology ..... 15

3.2.3. Outcome of Screening Process ..... 15

3.3. Scoping Phase ..... 16

3.3.1. Relevance and objectives of Scoping ..... 16

3.3.2. Steps in scoping exercise ..... 17

3.3.3. Scoping report and ToR ..... 17

3.4. Environmental and Social Impact Analysis ..... 20

3.4.1. Introduction ..... 20

3.4.2. Characteristics of environmental and social impacts ..... 22

3.4.3. Cumulative Impacts ..... 23

3.4.4. Evaluation of impact significance ..... 23

***3.5. Public and stakeholder participation*** ..... 26

3.5.1. Introduction ..... 26
3.5.2. Purposes of public participation ..... 26
3.5.3. Key stakeholder's identification in the ESIA process ..... 27
3.5.4. Principles of Public Participation ..... 28
3.5.5. Public Participation at different stages of ESIA processes ..... 28
3.5.6. Commonly used approaches for communicating with the public ..... 30
*3.6. Impact Mitigation and Management Measures* ..... 32
3.6.1. Introduction ..... 32
3.6.2. Objectives of Impact Mitigation and Management ..... 32
3.6.3. Elements of mitigation and principles for their application ..... 33
3.6.4. Approaches for impact mitigation ..... 34
3.6.5. Environmental and Social Management Plan (ESMP) ..... 35
**4. ESIA REPORT FORMAT** ..... 37
4.1. Introduction and relevance ..... 37
4.2. ESIS Format ..... 37
4.3. Brief elaborations of the different parts of ESIS ..... 38
4.3.1. Executive Summary ..... 38
4.3.2. Introduction ..... 38
4.3.3. Project Background, Description and Alternatives ..... 39
4.3.4. Administrative, Legal and Policy requirements ..... 39
4.3.5. Approach to the study ..... 39
4.3.6. Assumptions and /or Knowledge Gap ..... 39
4.3.7. Baseline Conditions ..... 40
4.3.8. Public concerns and views ..... 40
4.3.9. Potential impacts identification and analysis ..... 40
4.3.10. Mitigation and enhancement measures ..... 41
4.3.11. Environmental and social Management Plan (ESMP) ..... 41
4.3.12. Environmental and Social Monitoring and Auditing ..... 42
4.3.13. Conclusions and Recommendations ..... 42
4.3.14. Appendices ..... 42
**5. REVIEWING ESIA REPORTS** ..... 44
5.1. Introduction ..... 44
5.2. The ESIA Review Procedure and Tools ..... 44
5.2.1. Review procedures ..... 44
5.2.2. Review Tools ..... 46
5.3. Criteria for Evaluating Adequacy of ESIA Reports ..... 47

5.3.1. Review Criteria ..... 47
5.3.2. Overall Assessment of ESIA report ..... 51
5.4. Responsibilities of actors in the review process ..... 51
5.4.1. Competent Agencies Review ..... 51
5.4.2. Specialist Review ..... 52
5.5. Structure of the Review Report and Recommendations ..... 53
5.6. Decision Making ..... 54
5.6.1. Information needed for decision-making in the ESIA process ..... 54
5.6.2. Decision making at different stages of ESIA process ..... 55
5.6.3. Key qualities and responsibilities of decision-makers ..... 57
5.6.4. Means of implementing decision ..... 57
5.6.5. Validity of ESIA Report and Appeals ..... 57
**6. MONITORING AND AUDITING** ..... 59
6.1. Monitoring ..... 59
6.1.1. Introduction and relevance of monitoring ..... 59
6.1.2. Types of monitoring ..... 59
6.1.3. Contents of a monitoring report ..... 60
6.1.4. Responsibilities in Monitoring ..... 61
6.2. Environmental and Social Audit ..... 62
6.2.1. Introduction and relevance of Auditing ..... 62
6.2.2. Types of Environmental and Social Audit ..... 62
6.2.3. Methods of Auditing ..... 63
6.2.4. Responsibilities in Auditing ..... 64
6.2.5. Contents of Audit Reports ..... 64
6.2.6. Reviews and Verification of Audit Report ..... 65
***REFERENCES*** ..... 66
***APPENDIX*** ..... 68
APPENDIX 1: Example of an Application Form ..... 68
Appendix 2: Activity Classification Framework for Environmental and Social Impacts ..... 70
Appendix 3: Screening Checklist for Environmental and Social Impacts ..... 71
Appendix 4: Examples of activities/projects and their classification under different schedule ..... 73
Appendix 5: Terms of Reference for an Environmental and Social Impact Assessment ..... 77
Appendix 6: Examples of significance scoring and ranking system ..... 79
Appendix 7: Components of an environmental and social management plan (ESMP) ..... 80
Appendix 8: Example of Impact Management Matrix ..... 81
Appendix 9: Administrative Review Checklist ..... 82

Appendix 10: Technical Content Review Checklist..... 84
Appendix 11: Project-decision review checklist..... 96
Appendix 12: Checklist to Review a Social Development Plan (SDP)..... 98
APPENDIX 13: Template for Summarizing Environmental and Social Monitoring/Auditing Plan... 100

# Acronyms and abbreviations

| | |
|---|---|
| **APs** | Affected persons |
| **BAP** | Biodiversity Action Plan |
| **CBO** | Community-based organization |
| **CSO** | Civil society organisation |
| **CV** | Curriculum Vitae |
| **DSI** | Delegated Sectoral Institutions |
| **IEE** | Initial Environmental Examination |
| **EIA** | Environmental Impact Assessment |
| **EA** | Environmental Assessment |
| **EPE** | Environment Policy of Ethiopia |
| **ESAP** | Environmental and Social Action Plan |
| **ESIA** | Environmental and Social Impact Assessment |
| **ESMP** | Environmental and Social Management Plan |
| **ESIS** | Environmental and Social Impact statement |
| **FAO** | Food and Agriculture Organization of the United Nations |
| **FDRE** | Federal Democratic Republic of Ethiopia |
| **GHG** | Greenhouse Gas |
| **GIS** | Geographic Information Systems |
| **GoE** | Government of Ethiopia |
| **HIV** | Human immunodeficiency virus |
| **IAIA** | International Association for Impact Assessment |
| **IAP²** | International Association for Public Participation |
| **IAPs** | Interested and Affected Parties |
| **ILO** | International Labour Organization |
| **ISO** | International Organization for Standardization |
| **LA** | Licensing Agency |
| **MDGs** | Millennium Development Goals |
| **MEFCC** | Ministry of Environment, Forest and Climate Change |
| **NGO** | Non-governmental organization |
| **NRM** | Natural Resources Management |

| | |
|---|---|
| **PER** | Preliminary Environmental Report |
| **PIN** | Project Idea Note |
| **PPP** | Policies, Programmes and Plans |
| **REA** | Regional Environmental Agency |
| **RAP** | Resettlement Action Plan |
| **SMS** | Subject Matter Specialists |
| **SDP** | Social Development Plan |
| **TOR** | Terms of Reference |
| **TRC** | Technical Review Committee |
| **UN** | United Nations |
| **UNDP** | United Nations Development Programme |
| **WHO** | World Health Organization |

# Glossary and definitions

| | |
|---|---|
| **Affected publics** | persons who live nearby; will hear, see, feel, or smell the proposed project; are forced to relocate either voluntarily or involuntarily; have an interest in the project (whether or not they live in primary or secondary zones of influence); are interested in the potentially impacted resources; might normally use the land affected; or be affected by the influx of seasonal, temporary, or permanent residents associated with the project. |
| **Alternative** | a possible course of action that might be adopted in lieu of the proposed strategic action or project in order to evaluate environmentally sound alternatives by taking into account alternative site, design, input, process, including the "no action" alternative. |
| **Area of influence** | refers to the physical area (and components such as air, water, soil) over which a project creates impacts (including abiotic, biotic and socioeconomic) caused by a project (and its associated activities). |
| **Baseline** | refers to the data for a set of selected indicators measured near the beginning of a project, which are used to track change over time. The baseline data become a reference point, along with other benchmark values, against which future situations can be compared. |
| **Compensation** | where impacts cannot be avoided compensation means making restitution to people either individually or collectively. Compensation can be in the form of cash payments, or it can by in the form of the provision of other development activities, such as the provision of a hospital or a school or other public service. While compensation can be in response to a legal requirement stemming from the property rights of the affected community, it can also be done by the proponent as a goodwill gesture or as a negotiated outcome. |
| **Competent Agency** | any federal or regional government organ entrusted by law with a responsibility related to Environmental and Social Impact Assessment. |
| **Compliance** | means complying with the law and any regulations governing the activity. In an impact assessment context, it refers to the extent to which conditions attached in licensing the project have been observed. |
| **Complicated project** | refers to an investment project which has substantial impacts on the |

| | |
|---|---|
| | environment and society, including impacts beyond the border or accumulative impact on other investment projects, and in which complicated technology is applied. |
| **Consultant** | individuals or firms that act in an independent and unbiased manner to provide information for decision making. |
| **Cost-Benefit Analysis** | objective, careful, and explicit analyses of the costs and benefits of a proposed action. Such an analysis should also determine social discount rates for both costs and benefits. |
| **Critical habitat** | areas with high biodiversity value, including: (i) habitat of significant importance to critically endangered and/or endangered species; (ii) habitat of significant importance to endemic and/or restricted-range species; (iii) habitat supporting globally significant concentrations of migratory species and/or congregatory species; (iv) highly threatened and/or unique ecosystems; and/or (v) areas associated with key evolutionary processes. |
| **Cultural heritage** | refers to the legacy of physical artefacts and the intangible qualities of a group or society that are inherited from past generations, maintained in the present, and bestowed for the benefit of future generations. Cultural heritage includes tangible culture (such as buildings, monuments, books, works of art, and artefacts), intangible culture (such as folklore, traditions, language and traditional knowledge), and natural heritage (including culturally-significant landscapes, important wildlife habitats, and biodiversity). |
| **Cumulative Impact** | impact that may in itself not be significant but the combination of one or more impacts that can have a greater effect than the sum of the individual impacts. |
| **Decommissioning** | The cessation of operations of a project site; may include demolition and reclamation and/or redevelopment of the site. |
| **Direct impact (or effect)** | an impact which occurs as a direct result of the planned intervention. May also be called primary impact or first order impact. |
| **Displacement** | whereas resettlement is the active process of relocating people because of a project, displacement is the personal and social experience of the upheaval of relocation, the process of losing one's sense of place. In resettlement processes, physical displacement refers to the loss of housing resulting from project-related acquisition of land and/or restrictions on landuse that require the affected persons to move to another location. |

| | |
|---|---|
| **Environment** | the sum total of all physical, biological, social, economic, cultural, historical and political factors that surround human beings. It encompasses both the natural and built environments; and also includes human health and welfare. |
| **Environmental audit** | is an independent and objective oriented examination of whether the practice complies with expected standards by checking on some aspects of environmental management, and implies some kind of testing and verification. |
| **Environmental Compliance Certificate (ECC)** | a legal document which approves a report on initial environmental examination or a report on environmental and social impact assessment. |
| **Environmental and Social Impact Assessment (ESIA)** | studying, surveying, researching, analysing and estimating of possible positive and negative impacts on the environment and society, including short and long term impacts on health created by the investment. |
| **Environmental and Social Impact Assessment Report** | A report containing sufficient information to enable the Environmental Agency to determine whether and under what conditions a proposed action should proceed. |
| **Environmental and Social Management Plan** | an action plan that addresses the how, when, who, where and what of the environmental and social mitigation measure aimed at optimizing benefits and avoiding or mitigating adverse potential impacts of proposed operation or activity. It encompasses mitigation, monitoring, rehabilitation and contingency plans. |
| **Environmental and Social Management System** | is the means of ensuring effective implementation of an environmental and Social management plan or procedures and compliance with environmental policy objectives and targets. |
| **Economic displacement** | refers to the upheaval and social impacts (i.e. displacement) that are due not to relocation of the place of residence, but to the loss of economic livelihood, such as when farmers lose their farming land, or when water pollution destroys the livelihoods of fishers. |
| **Ecosystem** | a community of living organisms (plants, animals and microbes) in conjunction with the non-living components of their environment (like air, water and mineral soil), interacting as a system. |
| **Ecosystem services** | the idea that the environment (an ecosystem) provides a range of services (and products) on which humans depend. These are usually regarded as being: provisioning (e.g. the production of food and water); regulating (e.g. the control of climate and disease); supporting (e.g. nutrient cycles and crop |

| | |
|---|---|
| | pollination); and cultural (e.g. spiritual and recreational benefits). |
| **Effluent** | Wastewater - treated or untreated - that flows out of a treatment plant, sewer or industrial outfall; generally refers to wastes discharged into surface waters. |
| **Endangered species** | species that are under threat of extinction as listed on the IUCN Red List of Threatened Species. |
| **Externality** | economics terms that refers to the costs (and thus impacts) that are considered to be external or irrelevant to the consideration being made, thus typically the environmental and social impacts. A principle of sustainability is to internalize the externalities. |
| **Grievance** | any perceived concern evoking an individual or group's sense of entitlement or having been wronged, based on law, contract, explicit or implicit promises, customary practice or general notions of fairness. |
| **Human rights** | are defined by the United Nations as being "universal legal guarantees protecting individuals and groups against actions which interfere with fundamental freedoms and human dignity". |
| **Impact/effect** | any change to the environment or its component that may affect human health or safety, biophysical conditions, or cultural heritage, other physical structure with positive or negative consequences. |
| **Independent body** | a person or a firm that has no financial or otherwise vested interest in the proposed project or strategic action. |
| **Integrated Environmental And Development Management** | a code of practice for ensuring that environmental considerations are fully integrated into all stages of the development process in order to achieve a desirable balance between conservation and development and promote environmentally sustainable use of resources. |
| **Indirect impact (effect)** | impact which occurs because of another change which is caused by a planned intervention. In SIA, an indirect effect might be caused by a physical change to the environment. For example, a mine might increase river turbidity which might reduce the supply of fish which may reduce the economic livelihoods of fishing dependent villagers. These can also be secondary effects, second or higher order effects. |
| **Initial Environmental Examination (IEE)** | studying, surveying, researching and analysing data to estimate initial environmental and social impacts, including impacts on health which may arise from investment projects, as well as identify measures to prevent and |

| | |
|---|---|
| | mitigate possible environmental and social impacts. |
| **Interested and Affected Parties (IAPs)** | individuals or groups concerned with or affected by an activity and its consequences. These include local communities, work force, customers, or consumers, environmental interested groups and the general public |
| **Licensing Agency** | any organ of government empowered by law to issue an investment permit, trade or operating license or work permit or register business organization as a case may be. |
| **Mental health** | the level of psychological wellbeing and the absence of any mental disorder. Mental health includes an individual's ability to enjoy life, as well as their subjective wellbeing, perceived self-efficacy, autonomy, competence, and self-actualization of their intellectual and emotional potential. |
| **Mitigation** | the process of devising and implementing processes, procedures and/or changes to a planned intervention in order to avoid, reduce or minimise, or to compensate (offset) for impacts likely to be experienced. |
| **Mitigation hierarchy** | a framework for planning mitigation actions. A short form of it is: Avoid, Reduce, Repair, Compensate. A longer form goes: avoid at source; minimise at source; abate on site; abate at receptor; repair; compensate in kind; compensate by other means. |
| **Monitoring** | refer to a process of checking for compliance to conditions of consent for a planned intervention to go ahead, but typically refers to the process of ongoing testing to determine that there are no unanticipated impacts. |
| **Participation** | a process through which stakeholders influence and share control over development initiatives and the decisions and resources which affect them. It is a process, which can improve the quality, effectiveness and sustainability of projects and strengthen ownership and commitment of government and stakeholders. |
| **Performance bond or environmental insurance** | financial guarantee that should be set aside in a reputable bank by the proponent in the account of the concerned environmental agency for managing potential adverse impacts. |
| **Project developer/proponent** | any person, legal entity or organisation, from the public or private sector, who/which is licensed to undertake study, survey, design, construction and operation of an investment project. |
| **Public** | one or more natural or legal persons including individuals, civil societies, community based, or private organizations or institutions. |

| | |
|---|---|
| **Public hearing** | a meeting to be called by the Authority or the relevant Regional Environmental Agency in order hear the public view on the findings of an environmental assessments of a proposed sensitive or a controversial development initiative |
| **Public involvement/ participation** | refers to the inclusion of stakeholders in the preparation and implementation of project/activities whereas public participation simply means actively inviting the public to decision making, educating the public about the project, seeking their input to foster justice, equity and collaboration during project preparation and implementation. |
| **Perceived impact** | something that is believed to be a potential impact rather than something that has been established as being an actual impact. Note that perceived impacts affect how people feel about the project and how they feel and behave generally, thus perception is reality for them. |
| **Potential impact** | an impact that is predicted, rather than an actual impact that has already occurred. |
| **Prediction** | the task of identifying likely future impacts for a specific planned intervention. |
| **Program** | a coherent, organised agenda or schedule of commitments, proposals, instruments and/or activities that elaborates and implements policy, eventually comprising several projects. |
| **Project** | any activity including new development activity, major expansion or alteration of any existing undertaking, or any resumption of work that has been discontinued |
| **Project affected people** | means a natural person, legal entity, or organisation who/which are directly or indirectly affected by the investment project (or are likely to be affected) due to legally requisition of lands or real estate, changes of land category, and impacts on the ecological and environmental system in the their settlement areas. |
| **Residual impact** | the predicted adverse impacts which remain even after mitigation measured have been implemented. |
| **Regional Environmental Agency (REA)** | any regional government organ entrusted by that Region, with a responsibility of the protection or regulation of the environment and natural resources. |
| **Rehabilitation** | restoration of an environmental component, social service or system that has |

| | |
|---|---|
| | been affected by an activity to more or less its former states. |
| **Resilience** | capacity of a community or environment to recover from impacts that threaten it. |
| **Reviewing** | the determination of whether or not the environmental and social impact study report meets the approved Terms of Reference and provides satisfactory information and analysis that is required for decision-making. |
| **Risk** | the probability of an event occurring; but the term can be used with a slightly different meaning to refer to an uncertain event (of unknown probability) that, if it occurs, will affect achievement of one or more objectives. |
| **Scoping of the study** | means the process to determine the scope of the environmental impact assessment and the data needed to be collected and analysed, to assess the impacts of the investment project on the environment, in which, such study requires terms of reference (TOR) to prepare a report on environmental impact assessment. |
| **Screening** | means study and analysis of data contained in an investment project (document) to determine whether the proposed investment project requires initial environmental examination or environmental impact assessment or not. |
| **Social risk** | the World Bank defines social risk as "the possibility that the intervention would create, reinforce or deepen inequity and/or social conflict, or that the attitudes and actions of key stakeholders may subvert the achievement of the development objective, or that the development objective, or means to achieve it, lack ownership among key stakeholders. Such risks may arise out of the country's socio-cultural, political, operational or institutional context." |
| **Stakeholders** | mean any person, legal entity or organisation who/which are interested in, involved in or have interests in an investment project, in an activity or a matter (related to the project) because they are involved in or (are likely to be) affected by the investment project. |
| **Sustainable Development Goals (SDGs)** | SDGs officially known as 'Transforming' our world is a set of 17 "Global Goals" with 169 targets. It is spearheaded by the United Nations through a deliberative process involving its 194 Member States, as well as global civil society. The goals are contained in paragraph 54 United Nations Resolution A/RES/70/1 of 25 September 2015. |
| **Threshold** | levels that should not be exceeded; points at which irreversible or serious |

| | |
|---|---|
| | damage could occur, either to ecosystems and/or to social systems (health, safety, or well-being). |
| **Trade-offs** | refers to losing one quality or aspect of something in return for getting another quality or aspect. It implies a decision made with the full comprehension of both the up- and down-side of a particular choice. |
| **Trans-boundary impact** | any impact within an area under the jurisdiction of a country caused by a proposed activity the physical origin of which is situated wholly or in part within the area under the jurisdiction of another country. |
| **Trans-regional impact** | means any impact, within an area under the jurisdiction of a given regional state in Ethiopia caused by a proposed project or strategic action the physical origin of which is situated wholly or in part within the area under the jurisdiction of another Regional State. |
| **Terms of Reference (ToR)** | means all works needed to be done when carrying out environmental and Social impact assessment, in accordance with the scope of the study for assessing environmental impact. |
| **Threshold** | levels that should not be exceeded; points at which irreversible or serious damage could occur, either to ecosystems and/or to social systems (health, safety, or well-being). |
| **Trade-offs** | refers to losing one quality or aspect of something in return for getting another quality or aspect. It implies a decision made with the full comprehension of both the up- and down-side of a particular choice. |
| **Vulnerability** | a situation or condition characterized by low resilience and/or higher risk and reduced ability of an individual, group or community to cope with shock or negative impacts. Vulnerability is associated with having low socio-economic status, disability, ethnicity, or one or more of the many factors that influence people's ability to access resources and development opportunities. |
| **Vulnerable groups** | groups which a characterized by having vulnerability. Although vulnerability is context dependent and can include a very wide range of groups, typically the concept includes: ethnic minorities, migrants, disabled people, the homeless, the poor, those struggling with substance abuse, and isolated elderly people. |
| **Wellbeing** | the social, economic, psychological, spiritual, or medical state of an individual or group. |

# PREFACE

These guidelines build on previous documents entitled "EA Procedural Guideline, Environmental Impact Reviewing and Reporting Guidelines" issued by Environmental Protection Authority in 2000 and 2003.

These guideline series outline how considerations of environmental and social impacts are to be integrated into planning, implementation, and completion of project activities. It provides guidance on assessing the positive and negative impacts caused by project implementation, preparation and review of environmental and social impact statements, monitoring and auditing of development projects. Thus, the guidelines aim to ensure the Environmental and Social Impact Assessment (ESIA) reports provide comprehensive assessment and safeguards to manage environmental and social impacts. Comprehensive Environmental and Social Impact Assessment and Review process is needed to ensure that the ESIA reports comply with requirements, are consistent with standards of good practice, and provide good quality information to support decision-making in good time and faith.

This document has two parts.

**Part I contains:**

- ***Introduction, including legal and policy context, core values, and guiding principles***
- ***Roles and Responsibilities of ESIA Stakeholders***
- ***The ESIA Process***

**Part II contains:**

- ***ESIA Report Format***
- ***Reviewing ESIA Reports***
- ***Monitoring and Auditing Procedures***

The guideline documents will be used by various ESIA stakeholders such as Federal Environmental Agency, Regional Environmental Agencies, Sectoral Environmental Units or Delegated Sectoral Institutions, Project Developer, Consultants, Technical Review Committees, Expert Panels, and general public.

Various checklists, forms, and metrics are included in the appendix to assist the users these guidelines for screening, ....

and identifying environmental factors which may potentially be affected by development actions, or development actions which are likely to result in significant environmental impacts. Checklists provide indicators how data was acquired, analyzed, utilized, and stored.

# Part I

# Introduction, Roles and Responsibilities, and the ESIA Process

# 1. INTRODUCTION

## 1.1. Introduction

An Environmental and Social Impact Assessment (ESIA) is a systematic process of identifying, predicting, evaluating and mitigating the biophysical, social, and other relevant effects of development proposals prior to major decisions and commitments. The ESIA process starts at the conceptual design stage of a project and continues throughout project construction, operation and decommissioning. During the process, several deliverables are prepared to guide the activities of the specific stage. The purpose of an ESIA is to identify the positive and negative impacts caused by project implementation. This is assessed through an analysis of the effects resulting from interaction between environmental and social components and the various activities of a project and its development. ESIAs vary in scope and type of analysis, depending on the characteristics of the proposed project. In doing so, each element of a project should be analyzed for its potential to affect the environment and/or society during each phase of the project.

This Guideline outlines how consideration of environmental and social impact is to be integrated into planning, implementation and completion of project activities. It provides guidance on preparation and review of environmental and social impact statements, Monitoring and Auditing of development projects.

## 1.2. Policy and Legal context

ESIA was recognized at the United Nations Conference on Environment and Development (UNCED) in 1992 where Principle 17 of the Rio Declaration states: ***"EIA as a national instrument shall be undertaken for proposed activities that are likely to have a significant adverse impact on the environment and are subject to a decision of a competent national authority."***

In Ethiopia environmental management is grounded in a policy and legal framework that governs rights and obligations of citizens and enterprises. The major ESIA policy and legal framework are:

i. **The Constitution of the Federal Democratic Republic of Ethiopia (FDRE) (Proc.** 1/1995). It provides a basic framework for Environmental and Social Impact

Assessment (ESIA) system. The concept of Sustainable Development, Environmental Rights, and Environmental Objectives are stipulated in the constitutional article 43, 44, and 92 respectively.

***Article 43: The Right to Development***

1. The Peoples of Ethiopia as a whole, and each Nation, Nationality and People in Ethiopia in particular have the right to improved living standards and to sustainable development.
2. Nationals have the right to participate in national development and, in particular, to be consulted with respect to policies and projects affecting their community.
3. All international agreements and relations concluded, established or conducted by the State shall protect and ensure Ethiopia's right to sustainable development.
4. The basic aim of development activities shall be to enhance the capacity of citizens for development and to meet their basis needs.

***Article 44:- Environment Rights***

1. All persons have the right to live in a clean and healthy environment.
2. All persons who have been displaced or whose livelihoods have been adversely affected as a result of State programmes have the right to commensurate monetary or alternative means of compensation, including relocation with adequate State assistance.

***Article 92: Environmental Objectives***

1. Government shall endeavor to ensure that all Ethiopians live in a clean and healthy environment.
2. The design and implementation of programmes and projects of development shall not damage or destroy the environment.
3. People have the right to full consultation and to the expression of views in the planning and implementations of environmental policies and projects that affect them directly.
4. Government and citizens shall have the duty to protect the environment.

**ii. The Environmental Policy of Ethiopia (FDRE, 1997)**

This policy provided guiding principles for EA system in the country. With respect to ESIA, section 4.9 stipulates that public and private sector development programmes and

projects recognize any environmental impacts early and incorporate their containment into the development design process. It also requires the enactment of a law to undertake appropriate ESIA and environmental audits on private and state-led development projects; and the development of detailed technical guidelines to direct the implementation of ESIA and environmental audits. The policy also requires the establishment of an institutional arrangement responsible for undertaking, coordinating and approving ESIA and the subsequent environmental audits. It determines the scope and key elements of the ESIA process. In this regard, it states that ESIA should consider not only physical and biological impacts, but also address *social, socio-economic, political,* and *cultural conditions.*

### iii. The Environmental Impact Assessment Proclamation (Proc. № 299/2002)

This proclamation has made EIA to be a mandatory legal prerequisite for the implementation of major development projects, programs and plans. It is a basic legal framework to harmonize and integrate environmental, economic, cultural, and other social considerations into a decision making process in a manner that promotes sustainable development. Artticle3, sub-article 1 of this proclamation stipulates that no person shall commence implementation of a proposed project identified by directive as requiring EIA without first passing through environmental impact assessment process and obtaining authorization from the competent environmental agency. The proclamation obliges investment licensing institutions to get authorization from relevant environmental bodies prior to issuing investment permits or operation license to projects (Art. 3). It also requires such licensing institutions to suspend or cancel the permit or license they have issued for projects where the concerned environmental body suspends or cancels the authorization given for implementation of the project (Art. 12). The proclamation also allows for the imposition of a fine between fifty-thousand and one hundred thousand birr on any project owner who commences implementation of a project without obtaining authorization from environmental agencies or who makes false presentation in the environmental impact assessment study report (Art. 18).

### iv. Environmental Pollution Control Proclamation (Proc. № 300/2002)

It is promulgated with a view to eliminate or, when not possible to mitigate pollution as an undesirable consequence of social and economic development activities. This

proclamation is one of the basic legal documents, which need to be observed as corresponding to effective ESIA administration.

**v. Proclamation № 916/2015 on the Definition of Powers and Duties of the Executive Organs of the FDRE**

This proclamation mandated the Ministry of Environment, Forest, and Climate Change (MEFCC) to 'establish a system and follow up implementation for undertaking environmental impact assessment or strategic environmental assessment on social and economic development polices, strategies, laws, programmes and project set by the government or Private' (Article 30, sub article 1/b). It also requires MEFCC to 'establish a system for evaluating and decision making, in accordance with the Environmental Impact Assessment Proclamation, the impacts of implementation of investment programs and projects on environment prior to approvals of their implementation by the concerned sectoral licensing organ or the concerned regional organ' (Article 30, sub-article 1/e).

## *1.3. Core values of ESIA*

*Core values of ESIA are:*

- ***Sustainability*** **-------** the ESIA process should result in sustainable development by establishing long-term environmental and social safe guards.
- ***Integrity*** **-----** the ESIA process will confirm to agreed and established requirements**.**
- ***Utility*** **------**the ESIA process will provide balanced, credible information for decision making.
- ***Equity*****---------** that ESIA ensures fairness in the distribution of costs or benefits.

## *1.4. Guiding principles of ESIA*

The basic principles that underlie the ESIA objective are:

- **Early application -** proactive consideration and integration of environmental concerns at the earliest stages of the conceptualization of the projects
- **Participation -** appropriate and timely access and opportunity to the process for all interested and affected parties.
- **Issues based -** the focus of an **ESIA is on the** resolution of major issues of significant impacts.

- **Consider alternatives -** all feasible options to a project, or its components like site, processes, products, raw materials etc. including the "no go" option should be considered.
- **Accountability -** answerability of a proponent, consultant and environmental agencies for their respective roles and responsibilities.
- **Flexibility -** the assessment process should be able to adapt to deal efficiently with changing circumstances and decision-making situation.
- **Credibility -** assessments and reviews are undertaken with professionalism and objectivity.
- **Time and Cost-effectiveness-** the assessment process, its outcomes and decision taking will ensure environmental protection at the least cost and within reasonable time to society and developer alike.
- **Transparency -** all assessment decisions, and their basis, should be open and accessible to the public.
- **Supportive-** the review and decision-making process should enhance and support sustainable development and environmentally friendly investment efforts.
- **Conservation based -** the ESIA process should strive to promote conservation based development. Integrating conservation elements in the development planning that extend beyond conventional impact fixation approach can do this.
- **Practicality -** the information and outputs provided by the assessment process are readily usable in the decision -making and planning,

## *1.5. Benefits of ESIA*

**The basic benefits that underlie the ESIA process are:**

- Establishment of a robust understanding of the existing environment and social setting;
- Identification of the potential impacts upon the environment and local communities (both positive and negative) as a result of the proposed changes; and
- Ensuring that the design, implementation, operation and subsequent decommissioning of the development is carried out in such a way as to minimize adverse impacts on, and maximize potential benefits to, the environment and affected communities
- In general, ESIA helps to ensure that development proposal and activities and are environmentally sound and sustainable

- ESIA helps to avoid mistakes that can be expensive and damaging in environmental, social and economic terms
- ESIA is used for early warning planning of a wide range of resource use, development and conservation initiatives in order to make the most out of the options for achieving sustainability
- The use of EIA to choose the best project alternatives or options can help in the achievement of sustainable development.

# 2. ROLES AND RESPONSIBILITIES OF ESIA STAKEHOLDERS

The multitude of functions and responsibilities inherent in the ESIA process require clear definition and sharing of roles and tasks among different stakeholders. Therefore, defining the roles and responsibilities of each party would enable to harmonize the various interests and foster cooperation in a manner that averts duplication of efforts and promote efficiency.

Potentially, ESIA involves all members of society. For convenience and, above all in recognition of the common but differentiated roles each may manifest, the different actors are categorized in to the following five major groups:

## *2.1. Federal Environmental Agency*

Federal environmental agency (MEFCC, under the current context) is mandated by a proclamation provided for the establishment of Environmental protection organs (Proc. № 295//2002) and Proclamation № 916/2015, Environmental Impact Assessment proclamation (proc. **№** 299/2002), and other relevant laws to oversee and facilitate the implementation and administration of ESIA.

**In general, the Federal Environmental Agency has responsibility to:**

- Establish the required ESIA system (guidelines and standards) of federal level functions;
- Review and pass decisions on ESIA report and follow-up its implementations of Environmental and social Impact Study Reports for projects, where they are:
  - subjects to federal licensing, execution or supervision,
  - Proposed activities subjects to execution by a federal agency,
  - likely to entail inter or trans-regional impacts;
- Auditing and regulating the implementation of the conditions attached to project decision;
- Provide advice and technical support to the regional environmental agencies, sectoral institutions and the proponents;
- Make sure that all processes in ESIA administration is made in transparent, participatory and accountable manner;
- Resolving all complaints and grievances and and decisions are communicated in good time;

- Develop incentive or disincentive structures required for compliance;
- Proponents are provided with advice that help them best comply with ESIA requirements;
- Decisions are made without unnecessary delay and within the time frame stipulated in the relevant laws and in a manner that improve effectiveness and efficiency,
- Appropriate support is made available to all key actors in the ESIA process, builds their capacity, and engages in continuous awareness creation.

## *2.2. Regional environmental agencies (REA)*

Regional Environmental Agencies are any regional government organ or organs entrusted, by that Region, with a responsibility for the protection or regulation of the environment and natural resources. Regional Environmental Agencies are responsible to:

- Adopt and customize federal level ESIA guidelines and systems in line with their respective local realities;
- Administer, oversee, pass decisions, and play all the roles regarding impact assessment of projects:
  - subjects to licensing and execution by regional agency
  - project likely to have regional impacts
- Report to federal environmental agency (MEFCC) on major impact findings and malpractices that affect the environmental and social sustainability and cooperate with MEFCC in compliant investigations;
- Regarding projects and activities under the jurisdictions of federal environmental agency, regional agencies should write an endorsement letter verifying or confirming that:
  - the biophysical and socio-economic baseline conditions are adequately and truly described,
  - during scoping major issues are well defined and explicitly indicated in the Term of Reference (TOR),
  - interested and especially the affected parties or their true representatives are provided with all means and facilities (e.g. notice, assembly holes, reasonable time, understandable language) that enable them to adequately air their views and concerns,

- IAPs have agreed to and satisfied with the terms of compensations and the appropriateness of the EMP,

- The environmental monitoring activities are undertaken in appropriate time with the involvement of the IAPs and regular reporting is made in good faith and time to all concerned,
- The proponent/consultant fulfil the local and regional legal and policy requirements and obtain the necessary permits;
- The envisaged benefits to that communities and the regions are tangible;
- The monitoring plan are logical and allows the participation of relevant bodies in the region;
- The strategy for impact communication and reporting was understandable and appropriate at regional level stakeholders;
- The minutes of the consultation process reflects the true and unbiased accounts of the opinions and interests of the IAPs at the local level;
- Establish the necessary condition for the creation of awareness on ESIA in the region;
- Develop the necessary incentive and disincentive system in the region, etc.

## 2.3. Delegated Sectoral Institutions (DSI)

Delegated sectoral institutions are equivalent to 'Sectoral Environmental Units' as defined under article 14 proclamation № 295/2002. This article provides that every competent agency shall establish or designate an environmental unit that shall be responsible for coordination and follow-up so that the activities of the competent agency are in harmony with this proclamation and with other environmental protection requirements. They are responsible to execute all the mandate and responsibilities delegated by MEFCC on the base of coordinated but differentiated responsibilities as provided by proclamation № 295/2002 and other regulation and directive.

## 2.4. Licensing Agency (LA)

Licensing Agency is any organ of government empowered by law to issue an investment permit, trade or operating license or work permit or register business organization as a case may be.

Licensing agencies are required to:

- ensure that prior to issuing their respective licenses and permits, have legal duty to require proponents to submit authorization, a letter of approval or Environmental compliance certificate awarded by the appropriate Environmental Agency;
- ensure that environmental performance criteria are included in their respective sectoral incentive or disincentive structure;
- ensure that renewal or additional permits issuance should also considers integration of environmental concerns;
- to seek advice or opinion from the appropriate environmental agency, etc.

## 2.5. Proponent

Proponent is any organization (government, commercial or NGO) or individual which seeks to commence a particular project. A proponent is required to:

- initiate the ESIA process by submitting formal application and create the necessary ground for undertaking ESIA;
- actively integrate environmental and social concerns into project, as per the requirements of relevant environmental laws and directives;
- ensure that positive effects are optimized and strive to promote conservation based development and work with objectives of continuous improvement;
- appoint an eligible independent consulting firm who shall seek to undertake ESIA ,
- cover all expense associated with the Environmental and Social Impact Assessment, except expenses associated with regulatory authorities or competent agencies;
- submit all reports together with the necessary documents
- report on a regular bases about its environmental and social impact performance
- preparation and implementation of ESMP, that include both mitigation and monitoring measures and the associated institutional and human resources,
- submit to MEFCC, delegated sectors, or the relevant regional environmental agency an ESIA report together with the necessary documents requested both in an electronic and hard copies,
- observe the terms and conditions of authorization and work in partnership and cooperation with all responsible and interested parties,
- provide the necessary reports for stepwise decisions required for approval of the proposal,

- involve all interested and affected parties, and to that effect take all reasonable and practical measures to notify the latter in good time,
- establish environmental units to monitor the environmental performance of the project in a proactive manner to ensure sustainable development,
- consult relevant government institutions as the case may be,
- report on a regular bases about its environmental performance,
- establish database and network with all concerned parties, and respect local values and interests,

## 2.6. A Consulting firm

A consulting firm is an institution that can command the required qualified professional working group that has demonstrated the ability to undertake the ESIA, and meets the requirements specified under the relevant law. The consulting firm is expected to:

- have the expertise in environmental and Social impact assessment and management commensurate with the nature of the proposed activity and legal requirements,
- make available an interdisciplinary team, having solid technical skills and legal knowhow, and local knowledge,
- manage the participation of interested and affected parties in acceptable manner,
- have the facility to produce readable reports that are thorough and informative,
- declare and ensure at all times that has no vested interest in the proposed activity and observe all ethical values of the calling,
- familiar itself with legal and technical requirements of all the concerned bodies, and be able to include :
- statements from the regional environmental agencies,
- certificates and recommendations from the sectoral agencies,
- statements of local administration approval as the case maybe, and
- an endorsed minutes of public consultation process by appropriate local authority, as the verification of the truthfulness of all information contained in the ESIA report as well as fairness of the process,
- provide additional detailed information related to the environmental and social impact study report as may be requested,

- ensure that Interested and Affected Parties are provided with all means and facilities (e.g. notice, assembly holes, reasonable time, understandable language, fair representation, etc.) enabling them to adequately air their views and concerns,
- fulfil that they are legally registered and licensed to conduct the task,
- capable of presenting an authentic complete CV of experts to be employed for the task,
- present a true, pragmatic, analytical, understandable, and impartial account of the proposed activity, etc.

## *2.7. Interested and Affected Parties (IAPs)*

Interested and Affected Parties are individuals or groups concerned with or affected by the proposed activity or its consequences. These may include local communities, the work force, customers and consumers, environmental interested groups and the public. Interested and Affected Parties are expected to:

- provide comments at various stages of ESIA with reasonable time frame,
- work in partnership with Environmental Agencies and proponents,
- act and lobby in good faith, knowledge, reason and in a cooperative manner and use all means and facilities to ensure fairness in ESIA administration,
- follow and monitor changes and inform the environmental and sectoral agencies and local administration the occurrence of adverse incidence or any other grievance in the course of implementation of a project or public instruments,
- advocate and uphold the principle and values of environmentally sustainable development, etc.

# 3. THE ESIA PROCESS

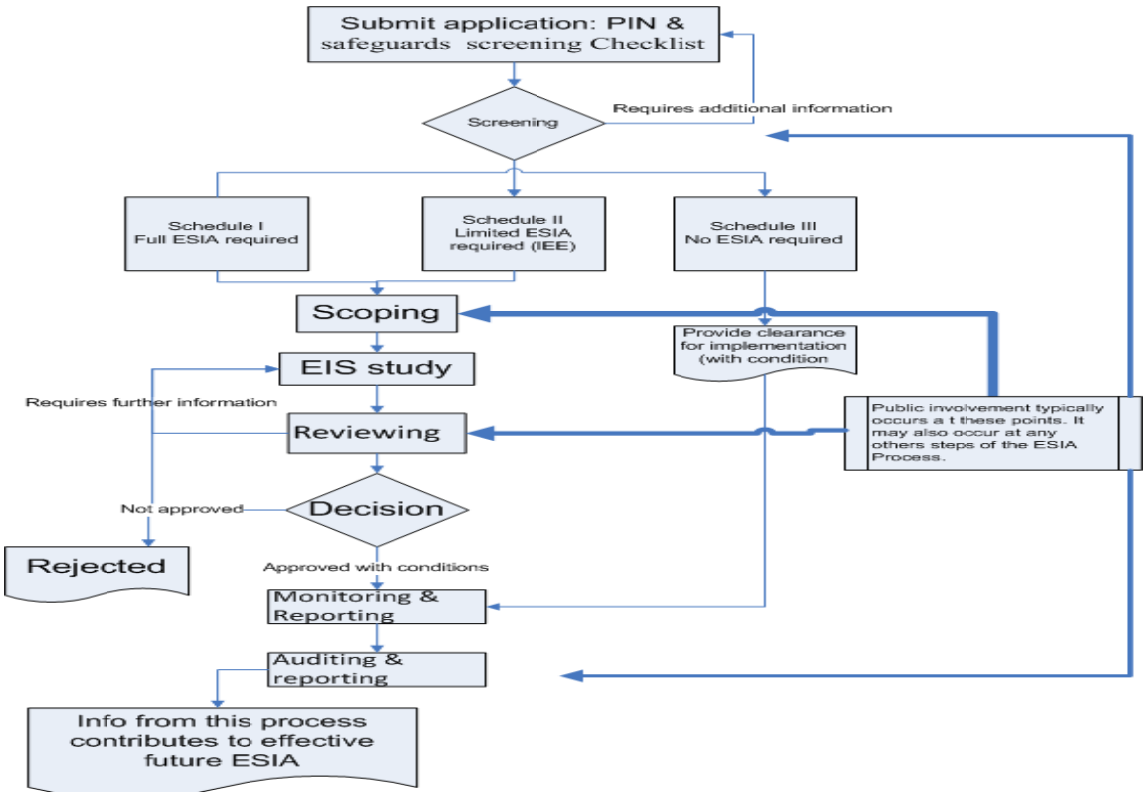



Figure 1. Flow Chart of ESIA Process

## *3.1. Pre-screening consultation*

Pre-screening is not normally taken as a part of a main step in the ESIA process. However, its application is recommended in recognition of its importance to enhance the overall effectiveness of the ESIA System.

Pre-screening is a stage where the proponent and the respective environmental or sectoral agencies establish contact and hold consultation on how best to proceed with the ESIA. The undertaking of a pre-screening consultation is advisable for it saves time and fosters a mutual understanding about the requirement. The main step in the ESIA process starts when proponent submits application to assessment agencies.

## 3.2. Screening

Screening is the first main step in the ESIA process, where upon receipt of application forms for the development proposal, the competent agency determines whether an ESIA is required or no. It is the classification stage to determine the level at which ESIA will be carried out. In making the decision whether full, preliminary or no ESIA is required, consideration of the following factors is taken: Sensitivity of the environment, location of a project, technology used, concern of the public, land use consideration, magnitude/scale of environmental and social impacts and any other relevant factors.

### 3.2.1. Project Registration

Registration is administrative procedure, which requires project proponents to officially declare the intention to engage in a particular project. For registration the proponent submits the completed application forms (Appendix 1) to the competent environmental agency, which provides the necessary information on the project profile to help decision making during screening. At this stage the proponent is required to provide a brief description of basic information about the project including the following aspects:

a. Type of project, objectives, size of the project and labour force, area to be covered, planned activities, type and amount of inputs including raw materials, types and amount of expected outputs, size and types of required infrastructure and services;
b. Name of the proponent and the consultant(s) representing the proponent, address of the proponent and the consultant(s) representing proponent (including telephone numbers, fax numbers and e-mail address);
c. Description of the Location of the project (sensitivity of the area),
d. Planned future extension of the project activities
e. Description of the project's socio-economic and biophysical environment, including degree of public interest
f. Outline of the project development at different phases (i.e. construction, operation and decommissioning)
g. Environmental enhancement and monitoring considerations.

Five copies of the screening report and accompanying documentation must be submitted to the Competent Agency for review. The Competent Agency shall make its decision **within one month** from the day of receipt of the screening report of the proposed project regarding amendment, exemption or conducting detailed study and notify the proponent accordingly.

In addition, the Competent Agency must inform the applicant whether the applicant must advertise the application, and of the manner in which this must be done. The advantages of advertising at this early stage are to formally inform all IAPs of the potential project and the ESIA process at the earliest opportunity. Advertising may take the form of "on-site" advertising where a notice board may be placed in the location of the site or through "media advertising" where an advert is placed in an appropriate newspaper (i.e. one that is read by the people where the development is proposed to take place).

### *3.2.2. Screening Methodology*

Screening determines whether the project is required to undertake full ESIA or requires undertaking of Preliminary Impact Assessment (Initial Environmental Examination) or does not require ESIA or should be rejected. It starts immediately upon receipt of registration forms and brief description of the proposed project. Screening makes use of information provided in the registration forms and/or the project brief. Basically projects/activities are screened using a combination of methods. Checklists tend to be the most widely used and effective screening method. The screening checklist poses a series of questions under each of the risks to be avoided as outlined in this guideline. It determines a list of projects/activities that must be subjected to different levels of environmental assessment. All projects listed in schedule 1 will be required to undertake full ESIA whereas those listed in schedule 2 may or may not require full ESIA (See: Appendix 2 and 3 for Activity Classification Framework and Screening Checklist in the ESIA process).

### *3.2.3. Outcome of Screening Process*

The outcome of screening could be one of the following:

- The proposed project has no potential impacts thus **"No ESIA is required"** the screening report is submitted to approving authority for issuance of environmental permit.
- The provided information is not enough to enable decision making thus a **"Preliminary Impact Assessment** is required" and be submitted for review to determine whether Environmental permit should be issued or a detailed ESIA should be accomplished. Preliminary assessment is applied to:
  - ✓ Projects with limited impacts,
  - ✓ Projects in which the need of ESIA is unclear, and
  - ✓ Proposals with inadequate information

- Full scale ESIA– when there is sufficient ground for detail assessment. This particularly applies for projects that appear in schedule 1.

## 3.3. Scoping Phase

### 3.3.1. Relevance and objectives of Scoping

Scoping is the process of identifying potential environmental and social impacts associated with the development of and focusing the ESIA process on the pertinent issues. An initial scoping of potential impacts will identify:

- Those impacts that are thought to be important;
- Those thought to be negligible or of such a low level of effect that they can be eliminated from further investigation; and
- Those for which the importance is uncertain.

The level of detail required as part of an impact assessment will depend heavily upon the nature and scale of the development, the sensitivity of the environment, and issues identified during the scoping process. Therefore, it is important that the scoping exercise be carried out effectively. If the screening results show that the proposed project will result in significant environmental impacts, the proponent will be required to undertake scoping exercise and submit a Terms of Reference.

The overall objective of scoping is to:

- Consider reasonable and practical alternatives for the project;
- Inform stakeholders of the development;
- Identify potential impacts that could result from the development;
- Evaluate concerns expressed from stakeholders and understand how local context, culture and values inform the concerns;
- Define the boundaries of an ESIA study (both in time and geographically);
- Determine the analytical methods that should be used to establish the significance of impacts;
- Establish ongoing mechanisms for consultation; and
- Establish the terms of reference (ToR) for specialist studies in the impact assessment phase of the ESIA; the ToR will set out the scope, methodology and procedural requirements that will be undertaken as part of the technical studies.

### *3.3.2. Steps in scoping exercise*

**Step 1**: Prepare an outline of the scope (plan of study for scoping).

**Step 2**: Identify the preliminary environmental and social impacts through an evaluation of how the project may relate to its receiving environment and surrounding community. This step should also include:

- ✓ A detailed project description of the receiving environment;
- ✓ Consider a range of alternatives including where to locate the project, alternative materials or inputs, alternative scheduling in project implementation;
- ✓ Determining the spatial, temporal and institutional boundaries within which the ESIA will be undertaken

**Step 3:** Initiate discussions with stakeholders. The stakeholders should be offered the opportunity to raise issues that they would like to see addressed during the ESIA as well as the opportunity to suggest alternatives. This step requires properly identifying all stakeholders; ensuring adequate, transparent and participatory public consultations.

**Step 4:** Identify issues of concern, including those raised by stakeholders (under step 3 above) and evaluate the significance of issues to determine which should be evaluated further in the ESIA. This includes undertaking review of literature (reports, policies, plans, legislation, guidelines etc); collecting all relevant information (social, cultural, economic, biological, and physical issues).

**Step 5:** Develop a strategy/plan of study to address the key issues. A plan of study should include:

- ✓ a brief description of the activity to be undertaken;
- ✓ a description of all tasks to be performed during scoping;
- ✓ a schedule setting out when the tasks contemplated will be completed;
- ✓ an indication of the stages at which the relevant authority will be consulted;
- ✓ a description of the proposed methods of identifying the environmental issues and alternatives

### *3.3.3. Scoping report and ToR*

The scoping exercise should be documented in the form of a scoping report that is submitted to the authority for review and approval. The scoping report should basically be a concise presentation of the major issues and opportunities identified and the public participation process.

As a minimum, the report should reflect the following:

- A brief description of the project;
- all the alternatives identified during the scoping process;
- all the issues raised by interested and affected parties and how these will be addressed; and
- A description of the public participation process including a list of interested and affected parties, and minutes of meetings should be annexed.

It is recommended that the information in the scoping report be as comprehensive as possible. This is because a decision about whether the project should go ahead or not and whether an ESIA is required to further investigate issues and alternatives will be made on the basis of this report. In many cases where there are no major issues identified, the scoping report will be sufficient for a decision to be made and no further studies will be required. Alternatively, further investigations may be required, or a full ESIA may be called for.

The scoping report should also contain detailed ToR for the ESIA. The ToR is also referred to as a plan of study in some ESIA documents.

The Draft Terms of Reference should provide formal and clear guidance for the ESIA team on issues that must be addressed in the Environmental and Social Impact Statement (ESIS). Some of the issues that should be addressed in the ToR include the following:

- Introduction: description/profile of the developer, project proposal, need and purpose of the undertaking the study.
- Project information: description of projects and alternatives to the project itself and project areas.
- Stakeholder involvement and analysis: indicate who are they, where are they, why they are important in this project, which issues are critical to them and how they will be involved in the ESIA study
- Description of the present environment that would be directly or/and indirectly affected by the proposed development.

- Analysis of both positive and negative impacts on natural resources, humans and their ecosystems. Impact analysis should clearly address cumulative impacts, trans-boundary impacts and reversibility of adverse impacts, based on their significance.
- Specify mitigation measures, monitoring and environmental management plans and decommissioning requirement
- Time: the duration and schedule for undertaking and reporting on the ESIA process
- Specific requirement for ESIA team (specialization)
- Specific reporting requirements
- Tentative format and main heading for the final ESIA report
- Conclusions and Recommendation.

Both the scoping report and the Terms of Reference should be submitted to relevant competent agency for review and approval (See: **Appendix 5** for detail contents to prepare Terms of Reference for an Environmental and Social Impact Assessment).

Five copies of the scoping report should be submitted to the Competent Agency for review. The Competent Agency should review the document to determine whether the process followed in preparing the report has been adequate and that there has been sufficient consultation with IAPs. Sufficiency should be based on the discretion of the reviewer.

The review should also contain an analysis of the information provided to determine whether due attention has been paid to possible project alternatives and whether the issues identified have been afforded appropriate attention. The authority should complete the review **within four weeks** of receipt of the scoping report. The authority may request, where it feels unqualified to review a scoping report, that the proponent appoint an independent specialist reviewer to provide comment on the report. The independent specialist should, however, be selected by the authority to ensure an unbiased assessment of the report.

Following the review of the scoping report the Competent Agency may request that portions of the document be amended or may decide to approve or reject the application without the requirement for further investigation. Should the information be inadequate to take a decision, the Competent Agency may request that the scoping report be supplemented by an ESIS.

## 3.4. Environmental and Social Impact Analysis

### 3.4.1. Introduction

Impact assessment or analysis refers to the identification and evaluation of environmental changes occurring as a result of implementing a project. It is a systematic and integrative process of drawing together an analysis of the likely environmental and social effects of a particular project. It is a critical process that makes use of baseline information that describes biophysical and social aspects of the project area and determines the most significant adverse impacts. The impact of a project is a change in parameters over a specified period within a defined area resulting from a particular activity compared with the situation which would have occurred had the activity not been implemented. It displays the difference between the states of parameter with the project compared to that without the project. The process of assessment of impacts can be broken down into three overlapping steps namely: impact identification, impact prediction and impact evaluation.

Environmental and social impact includes effects on:

- Human health and safety;
- Flora, fauna, ecosystems and biological diversity;
- Soil, water, air, climate and landscape
- Use of land, natural resources and raw materials
- Protected areas and designated sites of scientific, historical and cultural significance;
- Heritage, recreation and amenity assets; and
- Livelihood, lifestyle, and well being of those affected by a proposal.

Once all the important impacts have been identified, their potential size and characteristics can be predicted and analyzed. Impact prediction or forecasting is a technical exercise. It utilizes physical, biological, socio-economic and cultural data to estimate the likely characteristics and parameters of impacts (e.g. magnitude, spatial occurrence etc.). A range of methods and techniques may be employed. These can be a continuum from simple methods for impact identification to advanced methods, often involving the application of mathematical models. Experience indicates these simple methods are of proven value for undertaking a systematic approach to impact identification. The most common tools and techniques used for impact identification are:

- **Checklists**: are data collection tool in the form of simple descriptive or tabular format to present information which considers the potential impact of activities of a project on the different components of the environment. They are often used to identify direct impacts as well as cumulative impacts.
- **Matrices**: is a grid – like table that can be used to identify the interaction between project activities, which are displayed along one axis, and environmental characteristics that are displayed along the axis.
- **Networks:** illustrate the cause-effect relationship of projects and activities and environmental characteristics. They are therefore, useful in identifying and depicting secondary and other subsequent impacts (indirect, cumulative etc) as well.
- **Map overlays and Geographic Information Systems (GIS)**: are methods for identifying the spatial distribution of impacts, and can assist in identifying where cumulative impacts and impact interactions may occur as a result of project activities. Both map overlays and GIS methods involve the preparation of maps or layers of information which are then superimposed on one another.
- **Computer expert systems**: are used to assist diagnosis, problem solving and decision-making. A number of such computerized systems have been developed for use in ESIA primarily at the early stages of the process. For example, screening and scoping procedures have been automated using a number of rules and a data system that encodes expert knowledge and judgment.
- **'Best estimate' or expert/professional judgment:** although not strictly a formal method, professional judgment or expert opinion is widely used in ESIA. All methods of analysis involve professional judgment and the use of advanced tools and models will require expert knowledge. Knowledge and experience gained in ESIA work can be used to systematically develop data banks, technical manuals and expert systems, thereby assisting in future projects.

No single impact identification method is suited to use on all occasions, nor is necessary to use only one method at a time. Combining the useful aspects of two different techniques may be the best approach take. As noted above ESIA checklists, matrices and networks can have benefit when applied by experts in an interactive process such as science workshops, to identify impacts, model cause-effect relationships and establish impact hypothesis.

The choice of methods and tools can depend on a number of factors including:

- Type and size of the proposal

- Type of alternatives being considered
- Nature of the likely impacts
- Availability of impact identification methods
- Experience of the ESIA team with their use and resources available, information, time, personnel.

For small-scale projects, checklist and matrices will be sufficient while for the complex multi-dimensional projects; sophisticated tools e.g. mathematical model could be applied. In many cases, impact identification and prediction will need to be carried out by specialists in the disciplines involved or in the application of models and techniques. Impact identification and prediction are undertaken against environmental baseline information often delineated by selected indices and indicators (e.g. air, water, noise, ecological sensitivity, social cultural, and biodiversity).

When establishing a baseline, information is gathered on:

- Current environmental conditions;
- Current and expected trends;
- Effects of proposals already being implemented; and
- Effects of other foreseeable proposals.

### *3.4.2. Characteristics of environmental and social impacts*

The characteristics of environmental and social impacts vary depending on the nature of the project and the sensitivity of the environment. Typical parameters to be taken into account in impact prediction and decision-making include:

- Nature (positive, negative, direct, indirect, cumulative);
- Magnitude (severe, moderate, low);
- Extent/location (area/volume covered, distribution);
- Timing (during construction, operation, decommissioning, immediate, delayed, rate of change);
- Duration (short term, long term, intermittent, continuous);
- Reversibility/irreversibility;
- Likelihood (probability, uncertainty or confidence in the prediction); and
- Significance (local, regional, global).

### *3.4.3. Cumulative Impacts*

These are impacts that result from incremental changes caused by other past, present or reasonable foreseeable actions together with the project. For example:

- Incremental noise from a number of separate developments;
- Combined effect of individual impacts, e.g. noise, dust and visual, from one development on a particular receptor;
- Several developments with insignificant impacts individually but which together have a cumulative effect, e.g. development of small scale irrigation farms may have an insignificant impact, but when considered with several nearby small farms there could be a significant cumulative impact on local ecology and landscape.

The purpose of analyzing cumulative impacts is to identify and avoid situations where the impacts of discrete projects or activities act together to create significant adverse impacts. Professional judgment is usually required to oversee and where necessary, set limits on the collection of data required for impact analysis and monitoring.

### *3.4.4. Evaluation of impact significance*

Once the impacts have been analyzed, it is important to determine their significance, i.e. whether they are acceptable, require mitigation measures or are un-acceptable to the community. The interpretation of significance at this stage of ESIA, therefore, depends on the importance of the impacts for decision-making. In many cases this will be an assessment of the acceptability of the impact in terms of some existing criteria such as the permitted level of a substance or degree of change as specified in a standard, policy or plan. Following impact identification and prediction, impact evaluation is the formal stage at which a 'test of significance' is made.

A systematic process should be followed in evaluating significance, distinguishing between 'as predicted' and 'residual' impacts.

- **Step one** involves evaluating the significance of 'as predicted' impacts to define the requirements for mitigation measure and other remedial actions.
- ***Step two*** involves evaluating the significance of the 'residual' impact i.e. after mitigation measures are taken into account.

This test is the critical measure of whether or not a proposal is likely to cause significant impacts. It is determined by the joint consideration of its characteristics (magnitude, extent,

duration etc) and the importance (or value) that is attached to the resource losses, environmental deterioration or alternative uses which are foregone.

***Guiding Principles and Aids for determining significance include:***

- Environmental standards, guidelines and objectives;
- Adapt other relevant criteria or identify points of reference from comparable cases;
- Be consistent in the comparison of alternatives; and
- Level of public concern (particularly over health and safety)
- Assign significance rationally and be consistent in the comparison of alternatives
- Scientific and professional evidence for:
  - Loss/disruption of valued resource stocks and ecological functions;
  - Negative impact on social values, quality of life and livelihood; and
  - Foreclosure of land and resource use opportunities.
- Document the reasons for judgments made.

***Significance evaluation criteria***

- A test of significance can be applied by asking three questions:
  - Are there residual environmental impacts?
  - If yes, are these likely to be significant or not?
  - If yes, are these significant effects likely to occur e.g. are the probability high, moderate, or low?
- Criteria to evaluate whether or not adverse impacts are significant include:
  - Environmental loss and deterioration;
  - Social impacts resulting directly or indirectly from environmental change;
  - Non-conformity with environmental standards, objectives and guidelines; and
  - Likelihood and acceptability of risk.
- Criteria to evaluate adverse impacts on natural resources, ecological functions or designated areas include:
  - Reductions in species diversity;
  - Depletion or fragmentation on plant and animal habitat;
  - Loss of threatened, rare or endangered species;
  - Impairment of ecological integrity, resilience or health e.g. disruption of food chains, decline in species population, alterations in predator-prey relationships.

- Criteria to evaluate the significance of adverse social impacts that result from biophysical changes include:
  - threats to human health and safety e.g. from release of persistent and/or toxic chemicals;
  - decline in commercially valuable or locally important species or resources e.g. fish, forests and farmland;
  - loss of areas or environmental components that have cultural, recreational or aesthetic value;
  - displacement of people e.g. by dams and reservoirs;
  - disruption of communities by influx of a workforce e.g. during project construction; and
  - Pressures on services, transportation and infrastructure.
- Environmental standards, objectives and targets to evaluate significance include:
  - prescribed limits on waste/emission discharges and/or concentrations;
  - ambient air and water quality standards established by law or regulations;
  - environmental objectives and targets contained in policy and strategy; and
  - approved or statutory plans that protect areas or allocate, zone or regulate the use of land and natural resources.
- Impacts are likely to be significant if they:
  - are extensive over space or time
  - are intensive in concentration or in relation to assimilative capacity
  - exceed environmental standards or thresholds
  - do not comply with environmental policies, laws, regulations and directives
  - affect ecological sensitive areas and heritage resources
  - affect community lifestyle, traditional land uses and values

**See: appendix 6 for Examples of significance scoring and ranking system.**

The findings of the ESIA process need to be communicated in a way that is accessible to a wide range of stakeholders – from 'lay people' to decision-makers. Conventionally, this is achieved through the submission of the environmental and social impact statement (ESIS).

## 3.5. Public and stakeholder participation

### 3.5.1. Introduction

Public participation and involvement are fundamental principles of ESIA. Public refers to a majority of people in a community, generally considered as a whole in terms of opinion, view, perception, giving/receiving in regard to whatever touches their welfare/life. Stakeholder refers to individuals, groups of people and or institutions who has interests in, or is affected by, an issue or activity or transaction, and therefore has a natural right to participate in decisions relating to it (NEMC, 2005). Stakeholder participation involves processes whereby all those with a stake in the outcome of a project actively participate in decisions of planning and management. They share information and knowledge, and may contribute to the project so as to enhance the success of the project and ultimately their own interests.

Within a decision-making process, the involvement of individuals and groups would include NGOs, community organizations, women groups, traditional and village institutions that are both positively and negatively affected by a planned intervention (e.g. a project, a program, a plan, a policy) or are interested in it. Public participation is a constitutional right as clearly stipulated in the 1995 FDRE constitution and 1997 Environmental Policy of Ethiopia.

### 3.5.2. Purposes of public participation

Public Participation and involvement in Environmental and Social Impact Assessment aim to:

- Invite affected and interested people into the decision-making process to foster justice, equity and collaboration;
- Inform and educate the public on the planned intervention and its consequences;
- Gather data and information from the public about their human (including cultural, social, economic and political dimensions) and biophysical environment, as well as about the relations (including those related to traditional and local knowledge) they have with their environment;
- Seek input and opinions from the public on the planned intervention, including its scale, timing and ways to reduce its negative impacts and to increase its positive benefits;
- Contribute to better analysis and more creative development, and consequently to a better public acceptance and support;
- Facilitate consideration of alternatives, mitigation measures and trade-offs;

- ❖ Ensure that important impacts are not overlooked and benefits are maximized;
- ❖ Reduce conflict through the early identification of contentious issues;
- ❖ Provide an opportunity for the public to influence project design in a positive manner (thereby creating a sense of ownership of the proposal)
- ❖ Improve transparency and accountability of decision-making; and increase public confidence in the ESIA process.

### *3.5.3. Key stakeholder's identification in the ESIA process*

Determining who should participate in ESIA requires careful analysis because potential stakeholders will often represent different social groupings, religious affiliations, gender, academic and research institutions, private sectors and constituencies. Each can contribute in different ways and may advocate different priorities based on individual needs, motivations, and interests.

Powerful, influential, and wealthy groups tend to have better access to decision-making processes, and thus care is required to ensure that their views do not prevail to the detriment of the views, concerns, and needs of poor, affected, or marginalized groups. Recognizing such issues and balancing the needs of heterogeneous groups is crucial in ESIA. Some of the key stakeholders includes: government institutions, development agencies, private and commercial sector. It is important that these groups are involved, and that stakeholder involvement does not just focus on public groups.

***The community***

Individuals or groups in the affected community would like to know the proposed project, the likely impacts; and the way their concerns will be understood and taken into account. They would like to get an assurance that their views will be carefully listened to and considered on their merits. They would like the proponents to address their concerns. They also have knowledge of the local environment and community that can be tapped and incorporated into baseline data.

***Proponents***

Understandably, proponents will wish to shape the proposal to give it the best chance of success. Often, this involves trying to create public understanding and acceptance of the proposal through the provision of basic information. More creatively, project design can be improved through using public inputs on alternatives and mitigation and understanding local knowledge and values.

***Government institutions***

The government agencies involved in the ESIA process would like to have their policy and regulatory responsibilities addressed in impact analysis and mitigation consideration. For the component authority, an affective public involvement program can mean the proposal may be less likely to become controversial in the later stages of the process. For the responsible ESIA agency, the concern will be whether or not the public involvement process conforms to requirements and procedures. The advice and knowledge of government agencies, most directly concerned with the proposal should always be sought. However, in many cases, substantive information about the environmental setting and effects will come from other sources.

***Civil society organizations and interested groups***

Comments from NGOs and CBOs can provide a useful policy perspective on a proposal; for example, the relationship of the proposal to sustainability objectives and strategy. Their views may also be helpful when there are difficulties with involving local people. However, this surrogate approach should be considered as exceptional; it cannot substitute for or replace views that should be solicited directly. Other interested groups include those experts in particular fields and who can make a significant contribution to the ESIA study.

### *3.5.4. Principles of Public Participation*

Key principles of public participation include:

- Inclusive, open and transparent to cover all stakeholders
- Relevant-focused on the issues that matter
- Fair-conducted impartially and without bias toward any stakeholder
- Responsive-to stakeholder requirements and inputs
- Credible-builds confidence and trust
- Recognize right to information and heterogeneity of society
- Recognize the right of disadvantaged groups and employ effective communication
- Promote cooperation and contribute to mutual respect and understanding
- Improve the proposal and provide feedback mechanism

### *3.5.5. Public Participation at different stages of ESIA processes*

Public participation should be implemented during different stages of ESIA.

***Screening***

The public provides information that facilitates scrutiny of the proposal. In addition, the early identification of affected parties and their concern provides information that can be incorporated into the scoping stage of ESIA.

***Scoping***

Public participation is commonly undertaken at the scoping stage. Stakeholder analysis is a process that allows ESIA experts to widen the involvement of the people and institutions in project planning and design. It is an important means of identifying which stakeholders should be included within the ESIA process, and determining how the project might impact upon different groups. To be effective, stakeholder analysis should be undertaken during the scoping stage of ESIA by identifying their interests in relation to project objectives and activities. It is critical to ensure that all the significant local information about the project area is gathered and alternative ways of achieving the project objectives are considered so that the public can be acquainted with all issues regarding the undertaking.

***Impact analysis and mitigation***

During impact identification, determination of impact magnitude and significance and development of mitigation options/measures public involvement is highly required. In many cases, planning for public involvement in the mitigation plan will be a vital ingredient for success. Not only does it imply that the public needs to be involved in contributing to the formulation of the management plan, but also, the plan needs to be accessible to the public. This is likely to enhance environmental and social management because initially it is the people who will suffer or benefit.

Public participation in the impact analysis and mitigation phase can help to:

- Avoid bias and inaccuracies in analysis;
- Identify local values and preferences;
- Assist in the consideration of mitigation measures; and
- Select a best practicable alternative.

***Review of ESIS***

A major opportunity for public involvement occurs when ESIA reports are exhibited for comment (public disclosure). However, making written comments is daunting to all but the educated and literate. Other means of achieving responses should be provided where proposals are controversial. Public hearings or meetings may be held as part of ESIA review. They can be formal or informal but should be especially structured in a way that best allows those

affected to air their concerns. Some people or groups are not comfortable in speaking in public, and in such cases other or additional mechanisms may be used.

***Monitoring and auditing***

The environmental impacts of major projects will be monitored during construction and operational start up, with corrective action taken where necessary. Local representatives should scrutinize and participate in monitoring process. This arrangement can assist proponents and approval agencies to respond to problems as they arise. It can also help to promote good relations with local communities that are affected by a development.

More extended forms of public involvement occur when:

- Proposals are formally referred to public review, hearings or inquiries;
- Proposals depend upon gaining the consent or support of local stakeholders; and
- Proposals have major social impacts and consequences, such as the relocation of displaced people.

***A systematic approach to planning for public involvement program typically involves addressing the following key issues:***

- *Who should be involved?* Identify the interested and affected public (stakeholders), noting any major constraints on their involvement.
- *What type and scope of public involvement is appropriate?* – Ensure this is commensurate with the issues and objectives of ESIA
- *When and where should opportunities for public involvement be provided* – establish a plan and schedule in relation to the ESIA process and the number, type and distribution of stakeholders.
- *How will the results of public involvement be used in the ESIA and decision* – making processes?-describe the mechanisms for analyzing and taking account of public inputs and providing feeding back to stakeholders
- *What resources are necessary or available to implement the public involvement program?* – Relate the above considerations to budgetary, time staff requirements.

### *3.5.6. Commonly used approaches for communicating with the public*

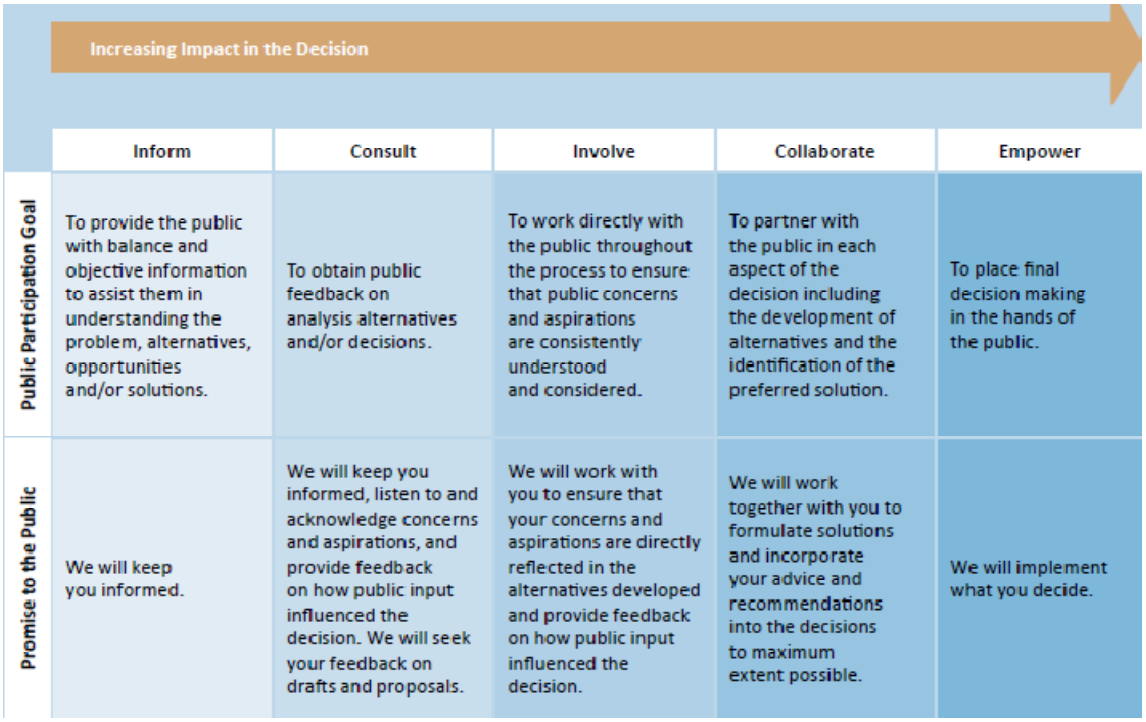
The approaches for public involvement should be adapted to suit the social environment and specific target groups. For instance, although people want to be consulted, they may not have

the time, resources, or ability to locate ESIA information and report their views to the relevant authorities.

When selecting public involvement approaches the following points should be considered:

- Provide sufficient, relevant information in a form that is easily understood by non-experts (without being simplistic or insulting);
- Allow enough time for stakeholders to review, consider and respond to the information and its implications;
- Provide appropriate means and opportunities for them to express their views;
- Select venues and time events to encourage maximum attendance and a free exchange of views by all stakeholders (including those that may feel less confident about expressing their views); and
- Respond to all questions, issues raised or comments made by stakeholders. This fosters public confidence and trust in the ESIA process.

Figure 2 Public participation spectrum




Source: IAP2, 2014

## 3.6. Impact Mitigation and Management Measures

### 3.6.1. Introduction

Impact mitigation and management t is a critical component of the ESIA process which aims at avoiding, preventing, minimizing or remedying adverse impacts from happening and keeps those that do occur within acceptable levels. Impact management is the process of translating mitigation measures into appropriate action plans during project implementation. It involves establishing systems and procedures for ensuring effective monitoring of mitigation measures and taking any other necessary actions when unforeseen impacts occur.

Mitigation and impact management ensure that proponents internalize the full environmental costs of their development actions to reduce cost burden to society and thus cost saving to his/her part. Both elements ensure that the ESIA process leads to well-planned practical actions to offset the adverse environmental impacts of proposed developments as well as enhancing positive aspects of project proposals. It is a means to guarantee cost-effective environmental safeguard.

Mitigation measures can either be structural or non structural. Structural measures are such as design or location changes, engineering modification for example in dams, roads, oil and gas exploitation and development or landscape or site treatment. Non-structural measures involve the non engineering or soft measures such as economic instruments, legal, institutional and policy instrument, provision of community services, training and capacity building.

### 3.6.2. Objectives of Impact Mitigation and Management

***Objectives of mitigation measures:***

- To find better alternatives and ways of doing things to avoid negative effects
- To enhance the environmental and social benefits of a proposal
- To avoid, minimize or remedy adverse impacts; and
- To ensure that residual adverse impacts are kept within acceptable levels.

***Objectives of impact management:***

- To ensure that mitigation measures are implemented

- To establish systems and procedures for this purpose
- To monitor the effectiveness of mitigation measures; and
- To take any necessary action when unforeseen impacts occur.

### *3.6.3. Elements of mitigation and principles for their application*

Main elements of mitigation are organized into hierarchy of actions:

- First - **avoid** adverse impacts as far as possible by use of preventative measures;
- Second- **minimize** or **reduce** adverse impacts to „as low as practicable" levels; and
- Third - **remedy** or **compensate** for adverse residual impacts, which are unavoidable and cannot be reduced further

**Steps of mitigation process**

A three-step process of mitigation can be applied to relate the hierarchy of mitigation:

- ***Step One: Impact avoidance***. This step is most effective when applied at an early stage of project planning. It can be achieved by:
  - Not undertaking certain projects or project activities that could result in adverse impacts;
  - Avoiding areas that are environmentally sensitive; and
  - Putting in place preventative measures to stop adverse impacts from occurring, for example, release of water from a reservoir to maintain a fisheries regime
- ***Step Two: Impact minimization.*** This step is usually taken during impact identification and prediction to limit or reduce the degree, extent, magnitude, or duration of adverse impacts. It can be achieved by:
  - Scaling down or relocating the proposal;
  - Redesigning elements of the project; and
  - Taking supplementary measures to manage the impacts.
- ***Step Three: Impact compensation.*** This step is usually applied to remedy unavoidable residual adverse impacts. It can be achieved by:
  - Rehabilitation of the affected site or environment, for example, by habitat enhancement and restocking fish;
  - Restoration of the affected site or environment to its previous state or better, as typically required for mine sites, forestry roads and seismic lines; and

- Replacement of the same resource values at another location, for example, by wetland engineering to provide an equivalent area to that lost to drainage or rainfall.

***Principles for their application***

Key principles for the application of mitigation consistent with the mitigation hierarchy include the following:

- ❖ preference to avoid and prevent impacts
- ❖ consider feasible alternatives to the proposal and identify the best practicable environmental option
- ❖ identify customized measures to minimize each of the main impacts predicted
- ❖ ensure that the mitigation measures are appropriate, environmentally sound and cost-effective; and
- ❖ use compensation or remedial options as a last resort

### *3.6.4. Approaches for impact mitigation*

Depending on the timing of the project cycle and the nature of impacts, a number of approaches can be taken to achieve the objectives of mitigation. These include:

- ❖ Developing environmentally better alternatives to the proposal;
- ❖ Making changes to project planning and design;
- ❖ Carrying out impact monitoring and management; and
- ❖ Compensating for impacts by
  - Monetary payment,
  - In-kind measures
  - Site remediation bonds
  - A resettlement plan.

The management of social impacts associated with the influx of a temporary workforce and additional population will require specific mitigation measures. These include the provision of:

- ❖ improved transport, water and sewage infrastructure;
- ❖ expanded social and health care services, including measures to target specific impacts;
- ❖ better support and counseling services to cope with socio-economic changes; and
- ❖ Additional recreational areas and facilities, including full replacement of any areas lost to development.

### *3.6.5. Environmental and Social Management Plan (ESMP)*

An Environmental and Social Management Plan (ESMP), also referred to as an impact management plan, is usually prepared as part of ESIA reporting. It translates recommended mitigation and monitoring measures into specific actions that will be carried out by the proponent. Depending upon particular requirements, the plan may be included in, or appended to the ESIA report or may be a separate document. The ESMP will need to be adjusted to the terms and conditions specified in any project approval. It will then form the basis for impact management during project construction and operation.

The main components of an ESMP are:

- summary of potential impacts of the proposal
- description of recommended mitigation measures
- statement of their compliance with relevant standards
- allocation of resources and responsibilities for plan implementation
- schedule of the actions to be taken
- programme for surveillance, monitoring and auditing,
- contingency plan when impacts are greater than expected and
- Decommissioning plan

The ESMP should contain commitments that are binding on the proponent. It can be translated into project documentation and provide the basis for a legal contract that sets out the responsibilities of the proponent. In turn, the proponent can use the ESMP to establish environmental performance standards and requirements for those carrying out the works or providing supplies. An ESMP can also be used to prepare an environmental management system for the operational phase of the project. See: Appendix 7 and 8 for detail description of ESMP components and example of impact management matrix.

The final outcome of ESIA is an Environmental and Social Impact Assessment Report also known as Environmental and Social Impact Statement (ESIS). On completion, the ESIS should be submitted to the Competent Agency for review.

The guideline for Report Format, Review Process, Monitoring, and Auditing will be presented in part two of this document.

# Part II

# ESIA Report Format, Reviewing, Monitoring and Auditing Procedures

# 4. ESIA REPORT FORMAT

## *4.1. Introduction and relevance*

The ESIA report or also called environmental and social impact statement (ESIS) should contain sufficient information to enable the authorizing agency to determine whether and under what conditions a proposed action should proceed. A full yet concise account should be given of the likely impacts of a proposal, the recommended measures for mitigating and managing them and the significance of any residual effects. Usually, the proponent is responsible for the preparation of the ESIA report. The information contained in the report should meet the terms of reference established at the scooping stage of the ESIA process. The terms of reference set out the information that is to be submitted to the responsible environmental agency.

ESIS/ESIA report is a tool for decision–making, the findings of the whole ESIA process need to be communicated in a way that is easily understood and accessible to a wide range of stakeholders, from 'lay people' to decision makers and professionals. The ESIS assists:

- The proponent to plan, design and implement the proposal in a way that minimizes or eliminates the negative effects on socio-economic and biophysical environment and, maximizes benefits to all parties in the most cost effective manner.
- Decision makers or responsible authorities to decide whether a proposal should be approved, and if so the terms and conditions that should be adhered to;
- The public to understand the proposal and its likely impacts on the community and environment

## *4.2. ESIS Format*

ESIS/ESIA report at a minimum is required to include:

- Executive Summary.
- Introduction.
- Project background, description and alternatives
- Administrative, Legal and Policy requirements.
- Approach to the study.
- Assumptions and/or uncertainties.
- Baseline conditions
- Public concerns and views

- Potential impacts identification and analysis
- Alternative analysis
- Public participation
- Mitigation and enhancement measures
- Environmental and Social Management Plan (ESMP)
- Environmental and Social Monitoring/ Auditing
- Conclusions and Recommendations.
- References
- Appendices

## 4.3. Brief elaborations of the different parts of ESIS

### 4.3.1. Executive Summary

This is the first part of the report that most people will read. The summary should provide a brief and accurate overview of the report in non technical and simple language, in particular highlighting the main findings and recommendations. A two or three page summary should be written containing the following:

- Title and location of the proposed undertaking
- Name of the proponent and contact
- Name of the consultancy agency
- A brief outline of the proposal
- Results of public consultation
- Alternatives considered
- Major impacts and their Significance
- Mitigation measure/compensation
- The way forward-Environmental and Social Management Plan

### 4.3.2. Introduction

This section gives overview of the projection conception and the necessity of carrying-out an ESIA. It discusses:

- Background – how the project was conceived, who the developer is, involved cost, financing of the project and ESIA consultant, etc.
- Objectives of ESIA
- Methodology

- Boundaries of ESIA study
- Duration of ESIA study

### *4.3.3. Project Background, Description and Alternatives*

This is a more detailed description of the proposal including any reasonable alternatives. A do nothing alternative should also be considered with a view of foregone loss of the expected benefits and future of the environment. Attention should be paid to the major differences between the alternatives. This section of the report should explain:

- The status of the proposal in the project cycle such as pre-feasibility, feasibility, detailed engineering design etc
- A description of plans/designs and implementation strategies used for impacts forecast and management measures
- The requirements for raw materials e.g. water, energy, equipment etc.
- The planned operational characteristics, its uses, process, products etc.
- Visual aids such as appropriate maps, tables, flow diagrams and photographs
- A comparison of proposal options such as size, sitting, technology layout, energy sources, source of raw materials within existing economic, technical, environmental and social constraints
- A summary of the technical, economic and environmental features of the proposal.

### *4.3.4. Administrative, Legal and Policy requirements*

Under this section applicable international, national and regional environmental legal and policy frameworks should be described in the context of the proposed action. Furthermore, administrative and institutional arrangement that will be required for implementation of the environmental management aspects of the proposed activities needs to be elaborated.

### *4.3.5. Approach to the study*

The methodologies to be used for identifying, predicting and evaluating of the impacts (both positive and negative), alternatives analysis and design of ESMP are required to be described under this section. In describing the approach due consideration should be paid to its appropriateness.

### *4.3.6. Assumptions and /or Knowledge Gap*

Reliability and quality of data to be collected regarding the proposed action might not be sound and conclusive enough. Under such circumstance it is important to indicate the gaps and

uncertainties. The analyst is, therefore, required to clearly state the level of uncertainties by considering:

- reasons (constraints) for the incomplete nature and/or assumptions of information
- confidentiality of the information
- the implications of those gaps and assumptions for decision making
- proposals or suggestions to make up for the limitations.

### *4.3.7. Baseline Conditions*

This elaborates the existing:

- Spatial, institutional and temporal boundaries
- Baseline conditions: biophysical, social, cultural, economic and land use
- Key trends and anticipated conditions, including prediction about the likely future environmental conditions in the absence of the proposed action.

### *4.3.8. Public concerns and views*

A concise and complete statement of the nature, scope and results of public consultation is an important section of the report. These particulars are sometimes overlooked or aspects are insufficiently described. Depending on the provision made for public consultation, some or all of the following points should be included:

- Identification of interested and affected stakeholders
- Method(s) used to inform and involve them
- Analysis of views and concerns expressed
- How these were taken into account
- Issues remaining to be resolved

### *4.3.9. Potential impacts identification and analysis*

This section details the actual impacts identification, prediction, and analysis. It includes description of how beneficial/adverse impacts and direct/indirect are expected to occur. The report should discuss about:

- Spatial, Institutional and temporal boundaries adopted for the various aspects of the study
- Condition of the biophysical, socio-economic environment as well as trends and the anticipated future environmental conditions
- Environmentally sensitive areas of special or unique values (such as scientific, socio-economic, cultural, visual etc)

- Causes and/or sources of the impacts
- Methods, techniques and standards used to predict or forecast impacts, of how environmental data was gathered
- Uncertainties in predicting impacts
- Significance of the different impacts; and
- Severity of impact (e.g. magnitude, duration, location, direction, reversibility etc.) as well s the likelihood of its occurrence
- Quantitative or qualitative assessment of the costs of different impacts
- Possible measures for avoiding or mitigating the effects of significant impacts
- Clear statement of residual impacts, i.e. those, which cannot be avoided or minimized, and recommendation for how these shall be managed.

### *4.3.10. Mitigation and enhancement measures*

The focus of this section is to suggest appropriate measures in order to avoid and/or minimize negative and enhance positive impacts of the proposed actions. Mitigation and enhancement measures should be project specific and take in to account various issues such as cost, views of stakeholders involved in the ESIA process.

The main types of mitigation and enhancement approaches which need due considerations are the following:

- Prevention or minimization of impacts,
- Elimination or reduction of adverse impacts,
- Rehabilitation or restoration of environmental damage,
- Compensation to environmental and social damage,
- Enhancement of beneficial impacts,
- Consideration of cost and benefit scenarios of recommended measures,
- Appropriateness and cost effectiveness of preferred measures,
- Appropriateness of the technology used and the level of skill required to operate or maintain the technology, etc.

### *4.3.11. Environmental and social Management Plan (ESMP)*

This is an action-oriented part of ESIA. The effective implementation of ESIA findings and recommendations hinges largely on the preparation and implementation of appropriate ESMP. It should thus include, at least, the following:

- outline of major positive and negative impacts,

- description of mitigation/enhancement measures,
- schedules of implementation,
- cost estimate,
- assign responsibility for implementation (by name or position of responsibility)
- surveillance and monitoring scheme with defined performance benchmarks and indicators,
- contingency plans, impact management strategy and response plans, where necessary
- attachment of environmental contract for the implementation of ESMP as the case may be,
- any institutional and capacity building requirements,
- Briefly present the planned community environmental management project (s) where necessary.

### *4.3.12. Environmental and Social Monitoring and Auditing*

This section outlines the mechanisms for checking environmental performance during the operational life of the project; so it ensures effective implementation of ESMP. This presents:

- The benchmarks for monitoring program to assess performance,
- An opportunity to review the Environmental and Social Management Plan (E&SMP) to take into account emerging issues/impacts,
- Outlines mechanisms for checking the environmental performance of the project,
- Monitoring schedule,
- Involvement of external experts for internal audits,
- Internal capacity building,

### *4.3.13. Conclusions and Recommendations*

This section should clearly and concisely indicates the critical justification, which is relevant to the decision-making. It should also highlight the key conditions of implementation.

### *4.3.14. Appendices*

These are separate documents to be used as references for the reviewers. They enable reviewers to reach at appropriate decision making. Examples of documents that may be provided as appendices are:

- detailed technical reports,
- site maps and flow charts

- specialist reports prepared in relation to the proposed project,
- proceeding of public involvement process endorsed by local authorities,
- list of people contacted,
- relevant quality certificates,
- ESIA study team and other contributors to the report; and
- detailed comments of stakeholders consulted.
- all tables, figures and other illustrative data containing environmental information,
- approved or endorsed Terms of reference (TOR) for the study.

# 5. REVIEWING ESIA REPORTS

## 5.1. Introduction

Review is a process that determines whether the impact assessment reports have adequately assessed the environmental, social and economic effects and are of sufficient relevance and quality for decision-making. In this regard the proponent submits different types of reports to the regulatory authority or competent agency for review. The reports include: Registration forms, scooping and ToR, Preliminary Environmental Report (PER), Environmental and Social Impact Statement (ESIS), Monitoring reports, and Environmental Audit report.

Review collates and collects the range of stakeholders' opinion; ensures that the reviewed document and process complies with the terms of reference. Furthermore it determines whether the proposal complies with existing plans, policies, standards, identifies gaps, inconsistencies and further information or mitigation required. Review may be undertaken by Competent Authorities, Specialists, and Technical Review Committee.

In summary, the relevancy of the review process is to:

- determine the adequacy of the assessment of environmental effects and proposed mitigation measures as well as the quality of the report for informed decision making,
- decide whether proposal should be approved and under which terms and conditions,
- support the proponents to fulfill their environmental stewardship obligation, cost reduction and facilitating acceptability of sustainable projects,
- enable the public to understand the potential impacts of the project and support the efforts to minimize the negative effects and maximize social benefits.

## 5.2. The ESIA Review Procedure and Tools

### 5.2.1. Review procedures

The ESIA review will be conducted at three stages:

- **Stage 1: Administrative Review**: assesses the completeness and presentation quality of a report. In cases where the report is very incomplete, it should be returned to the Project Developer before attempting a Technical Content Review.
- **Stage 2: Technical Content Review**: assesses whether the technical information is appropriate, sufficient, and adequate to make a decision on project approval. It identifies content deficiencies that must be addressed before the final submission of a

report. In cases where the technical content of the report is inadequate, the report should be returned to the Project Developer for revisions, before attempting the Project-Decision Review.

- **Stage 3: Project-Decision Review**: once administrative and technical reviews have ensured that the report has adequate information, the review procedure can address the question of whether the project should be approved. The Project-Decision Review step assesses whether the Project, as described, should be given an Environmental Compliance Certificate (i.e., is the project sustainable and implementable?) If yes, what conditions need to be attached to the compliance certificate?

The box below shows the 3-step review procedure and flow at a glance, with sub-steps.

Table 1: The Review Procedure and Flow at a Glance

| No. | Key activities | Average completion date |
|---|---|---|
| **1** | **Administrative Review** | **7** |
| 1.1 | Project developer or proponent submit five copies and soft copy of ESIA report to Competent Agency | |
| 1.2 | Competent Agency identifies the Review Coordinator (s). | |
| 1.3 | Review Coordinator (s) determine whether the report is complete and of good quality. | |
| 1.4 | If the report is incomplete, the Review Coordinator returns the report to the Project Developer for revisions. The Project Developer will revise and resubmit the Report for another administrative review | |
| 1.4 | If the report is complete/ comprehensive, it passes the Administrative review and proceeds to technical content review. | |
| **2** | **Technical Content Review** | **21** |
| 2.1 | Review Coordinator will set the scale / depth of the technical content review (assess time and intensity and availability of resources for review). | |
| 2.2 | Review Coordinator will select the reviewer(s) and distribute the report(s) to all members of the Technical Review Committee (TRC). TRC should involve various subject matter specialists (SMS). | |
| 2.3 | Reviewing an IEE or ESIA. | |
| | *2.3.1 Each Reviewer should prepare for a Review.* | |
| | 2.3.1.1 Conduct background research on the sector/project type. | |
| | 2.3.1.2 Conduct background research on the Project areas biophysical and social components. | |
| | 2.3.1.3 Read the whole IEE or ESIA report (and any sub-plan) . | |
| | 2.3.1.4 Undertake a site visit: physical verification is conducted by members of TRC and report is prepared for presentation to multi-sectoral review meeting. | |
| | 2.3.1.5 *Use input from stakeholders*: organising public review and hearings can provide significant stakeholder inputs. | |

| | | |
|---|---|---|
| | *2.3.2 Each Reviewer should read the IEE or ESIA report (and sub-plans) in detail and complete the relevant checklist(s) (from the perspective of his/her expertise).* | |
| | *2.3.3 Each Reviewer should summarize his/her review results and submit* findings *to the Review Coordinator.* | |
| 2.4 | Review Coordinator compiles all findings and invites the Project Developer to **a technical workshop to discuss the findings**. All comments and findings are summarized and submitted to Competent Agency. | |
| 2.5 | Competent Agency will order when and how the Project Developer is to revise the IEE or ESIA report (and other sub-plans), based on the consolidated *Technical Content Review* findings. | |
| 2.6 | The Project Developer will revise the IEE or ESIA report (and other sub-plans) as specified, re-submit the report(s), and Competent Agency will review the revised report(s). | |
| **3.** | **Project-Decision Review:** *Should the Project be approved? If yes, under what conditions?* | 10 |
| 3.1 | Competent Agency carefully consider whether the ESMPs are concrete enough and implementable, and sustainability. It also carefully considers the stakeholder consultation/participation process. | |
| 3.2 | Competent Agency to determine if all significant impacts have been resolved. | |
| 3.3 | If all significant impacts have been resolved, Competent Agency to set the conditions of approval for the Project. | |

### *5.2.2. Review Tools*

The following tools are used to review the adequacy of ESIA report.

***Guidelines:*** are documents that give guidance on the procedure, scope or aspects to be covered, format, and adequacy check in order to ensure that the statements are in a form that enables authorities to make well-informed decision. Review guidelines in particular provide criteria used in evaluating the reports and evaluation of combined review areas and their rating for overall assessment.

***Checklists:*** are the most widely used and effective tool for screening and identifying environmental factors which may potentially be affected by development actions, or development actions which are likely to result in significant environmental impacts. Checklists provide indicators how data was acquired, analyzed, utilized, and stored. They are dynamic document subject to critical review and regular updating with changing information on best practice and scientific knowledge.

***Site verification visits:*** In addition to the review guidelines and checklists, other relevant tools that aid the review process to arrive at a proper decision are site verification visits and discussions with local officials and residents.

## 5.3. Criteria for Evaluating Adequacy of ESIA Reports

The review of the adequacy of ESIA report should be governed by environmental and social assessment review criteria. Effective review criteria should allow a competent authority to disclose all relevant environmental and social considerations associated with a project and also provide information needed by decision-makers to access the acceptability of the environmental consequences. In particular, the competent authority has to:

- Ensure that all relevant information has been analyzed and presented,
- Assess the validity, accuracy, gaps and inconsistencies of information contained in the ESIS;
- Quickly become familiar with project proposal and consider whether additional information is needed;
- Assess the significance of the project's environmental and social effects;
- Evaluate the need for mitigation and monitoring of environmental impacts and
- Advice on whether or not a project should be allowed to proceed and under what conditions.

### 5.3.1. Review Criteria

***Review Area I: Description of the Development, Local Environment, and Baseline Conditions***

*a) Description of the Development*

- The purpose and objectives of the proposed development is clearly stipulated.
- Adequate description of size, scale and design
- Types and quantities of material and inputs needed during pre-construction, construction and operational phases identified.
- The types and quantities of wastes, energy and residual materials and the rate at which these will be produced estimated.
- The description of methods used to make these estimations, and the proposed methods of waste treatments and the identified residual materials.

*b) Site Description*

- The location and area of land affected by the development as shown on maps and the current land uses of this area clearly demarcated.

- ❖ The broader definition of affected site, enough to include any potential effects occurring away from the construction site (e.g. dispersal of pollutants, traffic, changes in channel capacity of water sources as a result of increased surface run of etc.)

*c) Baseline Conditions*

- ❖ A description of the current biophysical, ecological, socio-economic, and cultural baseline conditions and, prediction of the future condition if the project did not take place.
- ❖ The explanation of methods used to obtain the information.
- ❖ Baseline data should be gathered in such a way that the importance of the particular area to be affected can be planned into the context of the region or surrounding area and that the effect of the proposed change be predicted and monitored.

***Review Area II: Identification and Evaluation of Key Impacts***

*a) Identification of Impacts*

- ❖ The methodology used to identify and analyze likely impacts (both negative and positive) clearly outlined.
- ❖ The consulted guidelines, checklists, matrices, previous best practice examples of Environmental and Social Impact Assessments on similar projects (whichever are appropriate) also included.
- ❖ Consider impacts, in terms of positive or negative, short or long terms, permanent or temporary, direct or indirect and reversibility.
- ❖ The logic used to identify the key impacts on human beings, flora and fauna, soil, water, air, climate, landscape, cultural heritage, or their interaction, explained.

*b) Residual Impacts*

- ❖ Remaining impacts after mitigation are assessed using the appropriate national and international quality standards where available. Where no such standards exist, the assumptions and value systems used to assess significance should be justified.
- ❖ A clear statement of the residual impacts and their significance is provided. This is essential for decision-making since it reflects the 'cost' of the proposal in social and environmental terms.

*c) Cumulative impacts*

- ❖ Consideration for possibility of cumulative impacts where impacts on the environment take place so frequently in time or so densely in space that the environment cannot assimilate the effects. Cumulative impacts may also occur when impacts from one

activity combine with those of another to produce a greater impact or a different impact (also referred to as synergistic effects).

*d) Prediction of Impact Magnitude*

- ❖ The magnitude of each impact determined as predicted deviation from the baseline conditions, during the pre-construction, construction and operation phase.
- ❖ The data used to estimate the magnitude should be clearly described.
- ❖ The methods used to predict impact magnitude described.

*e) Assessment of Impact Significance*

- ❖ The significance of impacts assessed using the appropriate national and international quality standards where available.
- ❖ The assumption and value system used to assess significance justified of no standards exists.

***Review Area III: Alternatives, Mitigation, and Commitment***

*a) Alternatives*

- ❖ Alternative sites, undertakings, processes, technologies, design, and operating conditions are considered.
- ❖ The main environmental advantages and disadvantages discussed and the reasons for the final choice given.

*b) Mitigation*

- ❖ Specific mitigation measures are identified on all significant impacts. Mitigation methods considered may include modification of the project, compensation and the provision of alternative facilities as well as pollution control.
- ❖ Effectiveness of mitigation methods is ascertained. Where the effectiveness is uncertain justify the acceptance of the suggested interventions/assumptions.
- ❖ Effective environmental and social management and monitoring plan is in place.

*c) Commitment to Mitigation*

- ❖ The proponent has to commit funding to implement the identified mitigation measures and agreed environmental and social management and monitoring plan.
- ❖ These commitments shall be seen in the project policy and administrative arrangement.

***Review Area IV: Public Participation and Communication of Results: Pending***

*a) Stakeholders participation*

- ❖ Concerned stakeholders (e.g. government agencies, private sector, individuals, groups, and NGOs) are identified, adequately consulted and their concerns, issues and views are accounted for in the development of mitigation measures.

*b) Presentation*

- ❖ The presentation of information should be concise logical and understandable.
- ❖ Maps, diagrams, tables etc., where appropriate, should complement text. Technical information should be provided in the appendices.

*c) Balance*

- ❖ The environmental and social impact statement should be an independent study of environmental impacts with focused objectives and not a best-case statement for the development.
- ❖ Prominence and emphasis given to either negative or positive impacts in a balanced manner.

*d) Non-technical Executive Summary*

- ❖ A non-technical executive summary outlining the main conclusions and how they were reached.
- ❖ The summary should be comprehensive, containing at least a brief description of the project and the environment, the identified impacts of the proposed development, an account of the main mitigating measures to be undertaken by the developer, and a description of any remaining or residual impacts.

Table 2: Summarized Review Report Form

| Review areas | | Review criteria | Performance Against criteria | Weighted Rating | Remarks |
|---|---|---|---|---|---|
| 1 | Description of the Development Local Environment and Baseline conditions | • Description of the Development<br>• Local Environment and<br>• Baseline conditions | | 15 | |
| 2 | Identification and Evaluation of key impacts | • Identification and Evaluation of key impacts<br>• Residual Impacts<br>• Cumulative impacts<br>• Prediction of Impact Magnitude<br>• Assessment of Impact Significance | | 30 | |
| 3 | Alternatives, mitigations, ESMP, and commitment | • Alternatives<br>• Mitigations<br>• ESMP<br>• Commitment | | 40 | |
| 4 | Stakeholder participation and communication of results | • Stakeholder participation<br>• Presentation | | 15 | |

| | | | | | |
|---|---|---|---|---|---|
| | | • Balance<br>• Non-technical summary | | | |
| | **Total** | | | **100** | |

### *5.3.2. Overall Assessment of ESIA report*

*At the end of the review process the ESIA report shall be rated or graded as;*

A. (81% – 100 %) Excellent, no task left incomplete
B. (71% – 80%) Good, only minor omissions and inadequacies
C. (61% – 70%) Satisfactory despite omissions and inadequacies
D. (51% –60%) Parts are well attempted but must as a whole be considered just unsatisfactory because of omissions and/or inadequacies
E. (41% – 50 %) Poor, significant omissions or inadequacies
F. (<41%) Very poor, important tasks poorly done or not attempted

If overall performance is below C, then revision should be done. Normally, a brief summary of the key factors which determine the overall rating is provided, including an assessment of the strengths and weaknesses of the report as well any need for further study, and inputs required for impact monitoring and management by the proponent or the government.

## *5.4. Responsibilities of actors in the review process*

The roles and responsibilities of various actors in the overall ESIA process shall follow the general directions stipulated under section/chapter 2 of this guideline. Roles and responsibilities of specific actors regarding the ESIS review process is presented here.

### *5.4.1. Competent Agencies Review*

Competent agencies are any federal or regional government institution entrusted by law with a responsibility to review and pass decision on the ESIA report.

- ESIA reports of major development projects that are subject to licensing, execution, or supervision by federal agency or when they are likely to produce trans-regional impacts should be reviewed for their adequacy by MEFCC or Delegated Sectoral Institutions as deemed necessary;

- Both MEFCC and Delegated Sectoral Institution shall adequately follow the procedures given in this guideline and the contents of the various checklists to play their parts and coordinate the review process.
- The regional environmental agency is mandated to review ESIA reports of those development projects that are subject to licensing, execution, or supervision by regional agency or when the projects are likely to have regional impacts.
- Regional environmental agency is responsible for coordinating, undertaking analysis, and compilation of the review works (activities), under its respective region.

### *5.4.2. Specialist Review*

Specialist review shall be applied for:

- high-level technical proposals or complex projects;
- controversial proposals or where there is public concern and/or uncertainty over specific issues
- proposals for which competent federal and regional agencies lacks the expertise.

The purpose of specialist review is to enhance:

- Appropriate technical credibility;
- Integration, holistic planning and management and institutional coordination and cooperation;
- Accountability and transparency in deciding the fate of a proposal;
- Minimize subjectivity, bias, and conflict of interests.

Technical Review Committee and External or Expert Panels are the two most commonly applied approaches of specialist review.

***Technical Review Committee***

The Federal or Regional Environmental Agency shall establish a Technical Review Committee by comprising 11 members including:

- Woreda/district Administration
- Experts from MEFCC or its regional representative
- Sectoral ministries or project responsible agencies
- Other concerned agencies
- Issue-relevant specialists (e.g. health department or tourism department, when a proposal would likely affect those sectors)

- Representatives of project affected parties, NGOs, and private sector as deemed necessary depending on the nature of the project.

***External or Expert Panels***

For some complex projects, independent bodies or external specialists can be commissioned to review ESIA report and advice on the adequacy of certain (often very technical) issues. The experts and specialists team shall be established from Research Institutes and Universities. The Federal or Regional Environmental Agency shall establish expert panels or team when a review requires experts/specialists from a specific field. The specialists will review the ESIA (and any other sub-plan) and provide technical comments to the Federal or Regional Environmental Agency within 30 working days.

## *5.5. Structure of the Review Report and Recommendations*

Following review of the ESIA report by Technical Review Committee or Expert panels, the report will be compiled by the secretariat for further consideration by the approving agency.

***The contents of the review report***

- Background of the proposed project entailing purpose, location, size, type, processes, resources/inputs and out puts, and clarify the environmental planning and other studies conducted.
- A brief of project description and alternatives considered
- Review comments on general and specific issues.

***General comments***

- These will include major gaps, deficiencies, or shortcomings observed in the reports
- Will also consider if the report has complied with the prescribed terms of references, policies, laws, regulations and standards and other specific guidelines or sectoral checklists for that particular projects;
- Whether there was adequate public/stakeholder participation in the ESIA process,
- Whether there are commitments to mitigation measures, monitoring and management plans,
- Whether the quality of information is clear, credible, and accurate for decision-making.

***Specific comments***

- The focus of ESIS such as:

- The quality of predicted impacts
- The quality of mitigation measures
- Adequate treatment of project alternatives
- Adequate treatment of monitoring and management plans, their implementation arrangement and feedback
- Commitment of proponent to monitoring and management plans/programmes
- The role of public, district and others agencies and institutions.

❖ Scientific and technical soundness addressing mostly the methodological aspects, i.e. general methodological and approaches which guide the overall ESIS preparation and rationale. The use of sufficient quality data and analytical tools to reach conclusions are important. For instance, use of maps, GIS, cost/benefit analysis etc.

❖ Clarity of the statement and presentation: for the ESIS to be reviewed by the public, it must be well written and understandable. The use of non-technical summary is important and this should also be translated into local language.

***Recommendations of the review report***

❖ Environmental compliance certificate with terms and conditions to enable proponent to obtain other necessary licenses/permits;

❖ Approval subject to ongoing investigation;

❖ Require submission of additional information;

❖ Request for a supplementary ESIA report;

❖ The project as formulated may be rejected.

## *5.6. Decision Making*

Decision-making is a process that culminate in a final decision as to whether a proposal should be accepted or not, and determines the applicable conditions. It involves choosing between alternative courses of actions, weighing the benefits and costs and making trade-offs among a range of considerations. ESIA as an information gathering process, it facilitates informed decision making through consideration of a range of factors including technical, legal, political, social and economic aspects. It is a process that strives to achieve balance and justice among various choices.

### *5.6.1. Information needed for decision-making in the ESIA process*

The key aspects of ESIA reports which decision-makers need to take into account when making final approval and setting conditions for project implementation are summarized in Box 1. The list is not exhaustive but generic in order to allow reviews with a view to fine-tune the aspects according to the context of the project.

**Box 1: Important information for decision-makers**

**Background**

- Project background and the most important environmental and social issues involved
- Basic development issue or problem being addressed (e.g. flooding, water shortage etc)

**Policy context**

- The relationship to environmental and other development and social policies, legislations, programs and plans

**Alternatives**

- Alternatives to the proposal (including the best practicable environmental option or equivalent design)

**Public involvement**

- Key public views
- Concerns of affected communities
- Areas of agreement and disagreement

**Impact analysis**

- Costs and benefits
- Distribution of gains and losses

**Mitigation and monitoring**

- Adequacy of proposed mitigation measures and funding
- Appropriateness of environmental and social management plan

**Conclusion and recommendations**

- Main economic benefits, significant environmental effects and proposed development
- The extent to which the proposal conforms to the principles of sustainable development
- Design and operational changes to improve the environmental acceptability of the project

### *5.6.2. Decision making at different stages of ESIA process*

The term 'decision-making' is used in ESIA usually to mean the final approval of a ESIS, however, there are a series of 'intermittent' decisions made at different stages of ESIA process before the final approval as illustrated in table 3. Depending on the existing ESIA arrangement, the proponent and the regulatory authorities or competent agencies may make some of the

intermittent decisions jointly. The main decisions in the ESIA process lies with a competent agency following consultations and public involvement.

During ESIA preparation, the proponent often modifies the proposal to make it more environmentally and socially acceptable. Other decisions made by the proponent include selection of preferred alternatives, and making various choices of project design to avoid or mitigate potential impacts. The competent agency decides on the required level of the Impact Assessment and the appropriateness of ToR submitted with scoping report.

According to the Environmental Impact Assessment Proclamation (Proc. № 299/2002), the federal or the relevant regional environmental agency shall evaluate and pass decision on an environmental impact study report by taking into account any public comments and expert opinions. The possible decisions shall be:

a. approve the project without conditions and issue authorization if it is convinced that the project will not cause negative impacts;
b. approve the project and issue authorization with conditions that must be fulfilled in order to eliminate or reduce adverse impacts to insignificance if it is convinced that the negative impacts can be effectively countered, or
c. refuse implementation of the project if it is convinced that the negative impact cannot be adequately avoided.

Table 3: Main decision-making points in the ESIA process

| **Action** | **Decision-maker** | **Outcome (s)** |
|---|---|---|
| Selection of project design or alternatives to be considered | Proponent | Preferred project alternative or design |
| Screening of project proposal | Federal or Regional Competent Agency | No ESIA is require, or preliminary ESIA (IEE) or Full ESIA required or Reject the project |
| Approval of scoping and ToR | Proponent and/or Federal or Regional Competent Agency | Approval report and /or TOR |
| Review and acceptance of ESIS | Federal or Regional Competent Agency | Approval or approval with conditions or rejection of ESIS |
| Consideration of ESIS, review reports and other planning issues | Federal or Regional Competent Agency and/or relevant Sectoral Ministry | Approval of project (with conditions); or rejection of projects |

In making final project approval balance must be struck between the benefits and costs, their environmental, economic and social elements must be weighed, and uncertainties and arguments over the significance of risks and impacts.

### *5.6.3. Key qualities and responsibilities of decision-makers*

It is important for decision-makers to be aware of their responsibility to implement the ESIA process and use its results to better manage the environmental impacts and risks of a proposal. At a minimum, decision-makers need to understand.

- The basic concept and purpose of ESIA;
- ESIA requirements, principles and guidelines that are applicable;
- The effectiveness of their implementation and the implications for decision-making;
- Limitations that may need to be placed on information and advice contained in an ESIA report;
- How ESIA process and practice measure up to internationally accepted standards and to those in place in comparable countries, and
- The issues associated with public consultation in decision-making including third party and legal challenges to the authorization of proposals subject to ESIA.

### *5.6.4. Means of implementing decision*

- Establishing performance standards for meeting the conditions preferably as part of a legally binding contract with the proponent;
- Requiring the proponent to prepare (or revise) an environmental and social management plan (ESMP) to incorporate these standards and translate the approved conditions into a schedule of actions;
- Incorporating environmental management systems (EMS) to ISO 14000 certification for the Environmental Management Plan ; and
- Enforcing compliance with the conditions of approval and performance standards, with penalties for unwarranted breaches.

### *5.6.5. Validity of ESIA Report and Appeals*

- The Authorization of ESIA report shall expire if the project has not been implemented according to the time frame set during its authorization;

- If the proponent or the public is dissatisfied by the outcome of the decision, a provision for the right to appeal against the decision is provided on Environmental Impact Assessment Proclamation № 299/2002;
- The Federal or relevant regional environmental agency shall execute and decide on the appeal within 30 days from the receipt of an application pursuant to provisions on the Environmental Impact Assessment Proclamation № 299/2002;
- Approval can be reversed or permit can be revoked on the advent of changing circumstances;

The culmination of the approval procedure will be the issuance of an Environmental Compliance Certificate. Such certificate is a pre-requisite to obtaining other necessary permits such as business licenses, water, and energy use right, which are issued by other licensing authorities.

# 6. MONITORING AND AUDITING

## 6.1. Monitoring

### 6.1.1. Introduction and relevance of monitoring

Monitoring is a planned and systematic collection of data through a series of repetitive measurements of environmental and social parameters over a long period to provide information on characteristics and functioning of environmental and social variables in space and time. It is a basis of ESIA implementation and follow-up. Other components are dependent on the scope and type of monitoring information that is provided. The primary aim of monitoring is to provide information that will aid impact management, and to achieve a better understanding of cause-effect relationships and to improve ESIA prediction and mitigation methods. Monitoring ensures that the project complies with the existing environmental standards and limits and mitigation measures recommended in the ESIS are implemented and maintained throughout the operational life of the project.

Collection of monitoring data needs to be targeted at information necessary to manage the impacts that are significant or review the aspects of ESIA practice that are of particular importance. These aspects should be identified as early as possible in the ESIA process to optimize the contribution of monitoring data to the environmental and social management plan. Accordingly, monitoring methods involves:

i. Planning of monitoring programme
ii. Collection of samples
iii. Analysis and Interpretation of data
iv. Reporting of data (documentation and presentation of monitoring findings)
v. Site visit verification
vi. Review of compliance reports e.g. environmental and social management plan, audit report

### 6.1.2. Types of monitoring

There are four main types of monitoring,

***(i) Baseline monitoring:*** This is a measurement of environmental and social parameters during pre-project period. It is used to determine the nature and ranges of natural variation and where possible to establish the process of change. Baseline monitoring

creates a source of data for continuous monitoring of change during project implementation as well as initiating a database of baseline conditions for future incoming development activities.

***(ii) Impacts/Effects monitoring:*** Involves the measurement of parameters (performance indicators) during project construction and implementation to detect and quantify environmental and social changes, which may have occurred because of the project.

A sound baseline is a critical reference point for the conduct of effects monitoring. In turn, effects monitoring establishes the basis for corrective action when actual impacts are unanticipated or worse than predicted.

***(iii) Compliance monitoring:*** This type of monitoring focuses not directly at environmental parameters, but takes the form of periodic sampling and/or continuous measurements of levels of waste discharge, noise or similar emission or introduction to ensure that specific regulations, conditions and standards are observed and met.

Compliance monitoring carried out through repetitive or periodic measurements. This may suffice as a safety net for certain projects, for example where the mitigation measures are well tried and known to be effective. However, compliance monitoring will trigger impact management only if regulatory standards or specified conditions are exceeded and on its own may be insufficient for large scale, complex projects.

A more proactive, adaptive approach to impact management can be instituted by combining compliance or effects monitoring with supervision or regular inspection of site clearance, construction and mitigation activities.

(iv) ***Mitigation monitoring:*** Aims to determine the suitability and effectiveness of mitigation programmes, designed to diminish or compensate for adverse effects of projects.

Monitoring is undertaken at two levels, these are:

i. ***Internal monitoring***, which is routine monitoring undertaken by the proponent and report is being submitted for review to the regulatory or competent agency.

ii. ***External monitoring,*** which is the cross-check monitoring undertaken by regulatory or competent agency to ensure the regulatory requirements and standards are being meet.

### *6.1.3. Contents of a monitoring report*

The following items should appear in a monitoring report:

- Brief description of the project
- Purpose for monitoring

- Phase of the project
- Parameter/indicator (measurement and units)
- Frequency
- Standard level or norm
- Name and capacity of the person doing/reporting the monitoring
- Costs for monitoring
- Interpretation of the data
- Comment on the data

For monitoring to be effective, simple observations and reporting particularly from local people should be valued and taken into consideration. Verification of such observations by the developer should follow.

The Monitoring Plan should be prepared as part of the Environmental and Social Management Plan (ESMP) to mitigate and monitor the impacts of the proposed project. A budget for the monitoring plan needs to be drawn up and the resources and personnel necessary to carry them out should be specified in the ESMP.

### *6.1.4. Responsibilities in Monitoring*

Monitoring is a responsibility of project developer, regulatory authority or competent agency and other stakeholders.

***Project Developer***

- Shall collect and manage all the information in proper formats as specified in ESIS or normal code of practice;
- Shall submit monitoring reports to the regulatory authority bi-annually (i.e. every six months)
- Shall maintain a record of all reported information/complaints from different stakeholders

***The Regulatory Authorities or Competent Agency***

- Responsible for receiving monitoring reports as recommended on the ESIS;
- Shall prepare a written response on the reports;
- Accumulate a database on the environmental performance of the project basing on the monitoring reports;
- Responsible to intervene should there arise a controversial or any serious undesired impacts;

- ❖ Shall maintain a record of all reported information/complaints from different stakeholders

***Other stakeholders***

- ❖ Responsible to provide information to the regulatory authority and the developer on any particular aspect of the project as may arise;
- ❖ The developer and/or regulatory agency will make further investigation as a follow-up of information or notification received from the stakeholder.

## *6.2. Environmental and Social Audit*

### *6.2.1. Introduction and relevance of Auditing*

Environmental and Social audit is an independent and objective oriented examination of whether the project activities and practices comply with expected standards (UNEP, 2002). It involves comparing and verification of the impacts predicted in an ESIS with those that actually occur after implementation of the project.

Environmental and Social audits are used to:

- ❖ Identify the impacts of project implementation;
- ❖ Verify whether or not the conditions of approval have been implemented;
- ❖ Test the accuracy of impact prediction;
- ❖ Check the effectiveness of mitigation measures;
- ❖ Improve compliance and performance of ESIA practice.

### *6.2.2. Types of Environmental and Social Audit*

There are three types of environmental and social audit:

(i) ***Implementation/enforcement audit:*** this is undertaken by a competent agency to verify that mitigation measures and levels of emission are within limits. This can be done by analyzing their design. Such audits include activity audit, corporate audits and associate audits.

(ii) ***Performance/regulatory audits:*** this is a means of identifying compliance status of facilities and is a tool employed by corporate or management agencies. It checks whether a particular operation, process, site, company or project comply with relevant legislation (e.g. relocation and compensation).

(iii) ***Impact prediction audits***: these have the primary purpose of examining the accuracy and efficacy of impact predictions in the ESIS, i.e. testing how accurate the predicting

in EIS are by comparing them with actual monitored impacts once the project is underway.

### *6.2.3. Methods of Auditing*

The main methods for conducting an environmental and social audit are:

- Examination of records and documentation relating to impacts, actions taken to manage them and aspects of performance; this include reviewing the project ESIS, ESMP and other related project documents such as monitoring reports;
- Interviews with management and line staff to corroborate factual information and probe areas of concern; and
- Site inspection to check that environmental measures and controls are operating as described and intended.

In performing the above, the following questions need to be considered:

a) What environmental and social impacts were predicted for the project concerned;
b) When and where the predictions were stated;
c) What actual impacts have been monitored;
d) Where are the results recorded;
e) How do actual impacts compare with predicted impacts;

These questions need to be addressed for every relevant social and biophysical parameter. See Box 2 for detail steps to follow in auditing.

**Box 2: Steps to be followed in an audit**

- Identify the projects under consideration, and determine whether any environmental impact assessment was carried out for these projects, whether as a formal ESIA or as part of project planning, approval or funding documents
- Determine whether the project(s) were expected to produce major quantifiable impacts on specific components of the physical, biological or human environment. Some projects are not expected to produce any further significant impacts: e.g. building development in an already urbanised area.
- Determine whether the project(s) went ahead substantially as planned: some projects are modified considerably between planning and execution, and impact predictions may no longer apply
- Determine whether routine monitoring has been carried out for these project(s), and whether and where the results are available

- List all impact predictions, which are specific enough to be testable. If possible, express those predictions in quantitative form, including a measure of error. This is often difficult: predictions are often vague, and use non-quantified terms such as "likely", "unlikely", "significant", "negligible" etc.
- Determine whether the monitoring programme for the project(s) concerned actually measured the parameters required to test these predictions; and if so, whether the sampling design (e.g. location, frequency and precision of measurements) was statistically adequate to perform such a test.
- Adjust impact predictions, if necessary to take account of any modifications to the design of project(s) made after ESIA. Any such adjustments should be made before testing the adjusted predictions against monitoring results.
- Compare impact predictions and monitoring results to determine the accuracy of each prediction.

### 6.2.4. Responsibilities in Auditing

***Project Developer***

Project developer has overall responsibility for planning and undertaking environmental audit.

- Project developer or proponents are obliged to prepare auditing protocols;
- Appointing auditors based on the audit objectives and scope;
- Carrying out auditing and preparing an audit report;
- Project developer bears all the cost for the environmental auditing.

***Regulatory Authority or Competent Agency***

- Competent agency may undertake regular checks or audits;
- Review audit reports;
- Competent agency may make physical inspection and stakeholders' consultations in order to verify the contents of the audit review.

***Stakeholders***

- Avail information related to the project.

### 6.2.5. Contents of Audit Reports

An audit report must be prepared and submitted to the competent agency for review. The audit report should at least have the following suggested contents:

- Executive summary;

- Project's current status information;
- Audit objectives and scope;
- Audit protocol, criteria and methodology used;
- Findings and Observations;
- Description of key issues including the discovered project strengths and weaknesses;
- Recommended actions;
- Conclusions;
- List of document used/cited as references;
- Appendices (photographs, future Plan of Action, consultancy, list of stakeholders consulted, etc.)

### *6.2.6. Reviews and Verification of Audit Report*

Competent Agency or delegated specialist review team shall conduct an environmental audit review in relation to accuracy and coverage of key issues. The reviewer shall ensure that in the report:

- Comparison between the existing and the predicted impacts in the ESIS is made;
- Evaluation of the implementation and effectiveness of the mitigation measures recommended in the ESMP is done;
- Appropriate recommendations for remedial measures are made.

The review team may make physical inspection and stakeholders' consultations in order to verify the contents of the audit review. Beside physical inspection, the proponent shall be invited for clarification and discussion.

After the review, it is the responsibility of competent agency to provide a feedback to project developer on the environmental and social performances of the project in relation to ESMP. The developer should take to address issues raised in the audit report.

# *REFERENCES*


Annandale, D. 2001. Developing and evaluating environmental impact assessment systems for small developing countries, *Impact Assessment and Project Appraisal*, 19(3): 187-193.

Biswas, A. and Agarwala, S.B.C. (eds.) 1992. *Environmental Impact Assessment for Developing Countries*. Oxford: Butterworth - Heinemann Ltd.

FDRE. 1995. The Constitution of the Federal Democratic Republic of Ethiopia. Addis Ababa: Federal Negarit Gazeta, first year no. 1.

FDRE. 1997. Environmental policy of Ethiopia document, Addis Ababa, Ethiopia.

FDRE. 2002a. Environmental Protection Organs Establishment Proclamation, Proclamation, №. 295/2002, Addis Ababa, Ethiopia.

FDRE. 2002b. Environmental Impact Assessment Proclamation, № 299/2002, Addis Ababa Ethiopia.

FDRE. 2002c. Environmental Pollution Control Proclamation, № 300/2002, Addis Ababa, Ethiopia.

FDRE. 2003. Environmental Impact Assessment Guideline (Draft Document). Environmental Protection Authority, Addis Ababa, Ethiopia.

FDRE. 2003. Labour Proclamation, № 377/2003. Addis Ababa Ethiopia.

FDRE. 2013. Definition of Powers and Duties of the Executive Organs of the Federal Democratic Republic of Ethiopia (Amendment), Proclamation № 803/2013. Addis Ababa, Ethiopia.

FDRE. 2015. Definition of Powers and Duties of the Executive Organs of the Federal Democratic Republic of Ethiopia, Proclamation № 916/2015. Addis Ababa, Ethiopia.

HSTP. 2015. Health Sector Transformation Plan, 2015/16 - 2019/20. The Federal Democratic Republic of Ethiopia Ministry of Health, Addis Ababa.

IAP2. 2014. International Association for Public Participation (IAP2), Public Participation Spectrum, International Federation.

Modak, P. and Biswas, A. 1999. *Conducting Environmental Impact Assessment for Developing Countries.* United Nations University Press, Tokyo.

NEMC. 2005. Environmental Impact Assessment Training Manual, National Environment Management Council (NEMC) of Tanzania.

UNDP. 2013. Guidelines for Integrating HIV and Gender-related Issues into Environmental Assessment in Eastern and Southern Africa. Prepared for UNDP Regional Centre for Eastern and Southern Africa by the Southern African Institute for Environmental Assessment.

UNECA. 2005. Review of the Application of Environmental Impact Assessment in Selected African Countries, Addis Ababa; http://www.uneca.org.

UNEP. 2002. Environmental Impact Assessment Training Resource Manual. Barry Sadler and Mary McCabe (Eds.), 2nd edition, Geneva.

WBCSD. 2005. Environmental and social impact assessment (ESIA) guidelines. World Business Council for Sustainable Development (WBCSD). 54pp.

# *APPENDIX*

## *APPENDIX 1: Example of an Application Form*

| **APPLICATION FOR ENVIRONMENTAL AUTHORISATION** | | | | **Page: 1** |
|---|---|---|---|---|
| For official use only | Federal | | Application No: | |
| | Regional | | Date received: | |
| | Responsible official: | | | |
| **PARTICULARS OF APPLICANT** | | | | |
| Name of applicant: | | | | |
| Contact Person: | | | | |
| Postal Address: | | | | |
| | | | Postal Code: | |
| Telephone No: | | | Facsimile No: | |
| Cellular No: | | | E-mail address | |
| **TITLE OF PROPOSED ACTIVITY** | | | | |
| | | | | |
| **DESCRIPTION OF PROPOSED ACTIVITY**<br>(please append if insufficient space provided) | | | | |
| | | | | |
| **LOCATION OF PROPOSED ACTIVITY** (attach a site plan/map) | | | | |
| Region: | | | | |
| Nearest town: | | | | |
| Name of property(s): | | | | |
| Extent of property(s): | | | | |

| APPLICATION FOR ENVIRONMENTAL AUTHORISATION | Page: 2 |
|---|---|

PROBLEMATIC ISSUES IDENTIFIED: Describe potential environmental and social effects, significant risks and hazards associated with the proposal (including occupational health and safety. (please append if insufficient space provided)

CONSULTANT

I propose to make use of the following consultant:

| | | | |
|---|---|---|---|
| Name of consultant: | | | |
| Contact Person: | | | |
| Postal Address: | | | |
| | | Postal Code: | |
| Telephone No: | | Facsimile No: | |
| Cellular No: | | E-mail address | |

DECLARATION**:** I,……..hereby declare that the information provided on this form is true to the best of my knowledge and shall provide any additional information that shall come to my notice in the course of processing this application.

| SIGNATURES | | Date | | | |
|---|---|---|---|---|---|
| Applicant: | | Date: | | Place: | |
| Witness: | | Date: | | Place: | |
| Witness: | | Date: | | Place: | |

## *Appendix 2: Activity Classification Framework for Environmental and Social Impacts*

During the development of Activity concepts and designs all Activities will be assigned to one of the following categories reflecting the level of impact or risk and the type of impact assessment required.

| **Category/ Schedule**[1] | **Description** | **Assessment**[2] |
|---|---|---|
| 1 | The Activity has the potential to cause significant adverse impacts considered irreversible or unprecedented, and which extend beyond the physical footprint of the Activity | Comprehensive impact assessment covering the full range of environment and/or social impacts, and impact management plan |
| 2 | The Activity has the potential to cause adverse site-specific impacts which are potentially reversible or more easily mitigated than for category 'A'. As part of the design phase an impact assessment is to be conducted covering adverse impacts only, along with an impact management plan demonstrating how these will be addressed | Impact assessment and impact management plan covering adverse impacts only |
| 3 | Minimal or no adverse impacts | None – no further action needed |

[1] **Note 1** - The category assigned to the Activity/project reflects the most environmentally or socially sensitive component. For example, if the Activity is expected to generate a number of adverse impacts and one of these is considered to be significant in accordance with the description of category 1 Activities, category 1 applies.

[2] **Note 2** – Impact assessments will typically cover both social and environmental impacts for category 1and 2 Activities. Assessments can be restricted to social issues if it can be demonstrated there are likely to be no adverse environmental impacts. Similarly, assessments can be restricted to environmental issues if it can be demonstrated there are likely to be no adverse social impacts, although this scenario is unlikely.

# *Appendix 3: Screening Checklist for Environmental and Social Impacts*

**How to use the Checklist**

1. Using available information, answer as many questions as possible by placing a checkmark in one of the three columns: 1, 2, or 3. If you are unsure of your answer, due to a gap in knowledge or available information, place a checkmark in as many columns as seems reasonable to deal with the range of likely possibilities.
2. Once all the questions have been answered, assign the Activity to the category (1, 2, or 3) that reflects the most environmentally or socially sensitive component. For example, if the Activity is expected to generate a number of adverse impacts and one or more of these are considered to be significant (in accordance with the description of category 1 Activities), the Activity should be assigned to category 1.

| **Questions** | **Yes (sig)** | **Yes** | **No** | **Comments** |
|---|---|---|---|---|
| | 1 | 2 | 3 | |
| **Will the Activity lead to adverse environmental, ecological, or public health impacts?** | | | | |
| Is the Activity taking place adjacent to or within an environmentally or culturally sensitive area? The following is a non-exhaustive list of examples:<br>• Cultural heritage site<br>• Designated protected or conservation area<br>• Wetland, biodiversity hotspot or sensitive areas | | | | |
| Will the Activity lead to any of the following?<br>• Alteration, conversion, or degradation in the quality or quantity of critical habitats<br>• Introduction of non-indigenous species<br>• Decrease in land value (economic or amenity) due to noise, traffic congestion, degradation of environmental aesthetics etc.<br>• Noise or vibration disturbances<br>• Soil or coastal erosion<br>• Water quality deterioration<br>• Loss of agricultural productivity<br>• Increase in levels of pollution, whether point-source or diffuse (e.g. fertilizers contaminating ground or surface water)<br>• Occupational health and safety risks due to physical, chemical, or biological hazards<br>• Increased exposure to communicable disease<br>• Increased access to tobacco, alcohol, and recreational drugs<br>• Decreased access to nutrition | | | | |

| | | | | |
|---|---|---|---|---|
| **Questions** | **Yes (sig)** | **Yes** | **No** | **Comments** |
| | 1 | 2 | 3 | |
| **Will the Activity lead to unsustainable extraction, use, or management of living resources?** | | | | |
| Will the Activity involve an increase in the capacity or intensity of fishing, agriculture, or forestry? | | | | |
| Will the Activity lead to a direct or indirect change in management practice from traditional to non-traditional with unknown consequences for sustainability of living resources? | | | | |
| Is the Activity likely to trigger or exacerbate unresolved tenure conflicts concerning access rights or alternative uses of natural resources? | | | | |
| **Will the Activity reduce resilience to climate change, climate variability, or natural hazards?** | | | | |
| Is the Activity taking place in an area subject to extreme events such as earthquakes, floods, landslides, storm surges? | | | | |
| Could short or longer term changes in the climate (e.g. rainfall, air temperature, salinity) adversely impact the sustainability of the Activity? | | | | |
| Are there demographic or socio-economic aspects of the area which are already vulnerable? e.g. high incidence of marginalized populations, informal settlements, urban poor | | | | |
| **Will the Activity contravene applicable environmental, labour or human rights laws, conventions or regulations?** | | | | |
| Having identified potential adverse impacts associated with the Activity, will one or more of these contravene any of the following?<br>• international laws or conventions Ethiopia is signatory to<br>• relevant national and regional laws or regulations<br>• local customary practice | | | | |
| **Will the Activity lead to social harm, including societal divisions, corruption, loss of livelihoods, violent conflict, forced relocation, or political instability?** | | | | |
| Will the Activity lead to any of the following?<br>• Dislocation or involuntary resettlement of people<br>• Disproportionate impacts on the poor, women, children, people with disabilities, and other vulnerable groups<br>• Social conflicts if workers from other regions or countries are hired<br>• Creation of slum communities<br>• Accidental disruption of utilities<br>• Increased burden on social infrastructure and services<br>• Exacerbation of discrimination against ethnic/cultural minorities and other groups vulnerable to discrimination<br>• Exploitative labour practices, e.g. dangerous health and safety, poverty wages, child labour<br>• Loss of access to resources for livelihood opportunities | | | | |

## *Appendix 4: Examples of activities/projects and their classification under different schedule*

The following is a non-exhaustive list of examples of Activities and their likely classification under different schedule. Judgment should be exercised at all times when classifying Activities through careful assessments of the potential impacts and risks.

| Example Activities: Schedule 1 |
|---|
| • **Large-scale energy projects**<br>o High power transmission line<br>o Medium and large-scale bio-energy development and bio-mass energy using plants<br>o Thermal power stations and other combustion installations with a heat output of 100 Mega Watts or more<br>o Hydroelectric power having dams over 15 meters high and ancillary structures covering a total area in excess of 20 hectares and/or reservoirs with a surface area in excess of 250 hectares<br>o Construction of combined cycle power station<br>o Large-scale wind and solar farms<br>• **New airstrips, ports, and related transport infrastructure**<br>o Major urban roads<br>o Rural road programmes<br>o Rail infrastructure and railways<br>o Airports with a basic runway length of 2,100 m or more<br>o Trans-regional and International high way<br>• Activities taken place within or immediately adjacent to nationally or internationally designated area of conservation or heritage<br>• **Large-scale agricultural Activities**<br>o Land reclamation (large scale)<br>o Agricultural Projects necessitating the resettlement of 100 families or more<br>o Development of agricultural estates covering an area of 200 hectares or more involving changes in type of agricultural use<br>o Use of new pesticide or fertilizer other than those recognized or specified by the concerned government body<br>o Agricultural mechanization and other services (large scale)<br>o Introduction of new breed, species of crops, seeds or animals<br>• **Large-scale forestry activities**<br>o Conversion of hill forest land to other land use<br>o Logging or conversion of forest land to other land use within the catchment area of reservoirs used for municipal water supply, irrigation or hydropower generation or in areas adjacent to parks<br>o Logging with special emphasis for endangered tree species<br>o Conversion of mangrove swamps for industry, housing or agricultural use covering an area of more than 10 hectares<br>o Clearing mangrove swamps on islands adjacent to parks<br>o Large scale afforestation/reforestation mono-culture forest plantation projects which use exotic free species<br>o Conversion of forest areas which have a paramount importance of biodiversity conservation to other land use<br>o Resettlement programs in natural forest and woodland areas.<br>• **Livestock and Fishery activities**<br>o Large scale open range rearing of cattle, horses, sheep etc<br>o Large scale livestock production in Urban area<br>o Large scale slaughter house construction<br>o commercial fisheries and introduction of exotic species |

- **Rural and Urban water supply, drainage and irrigation Activities**
  - Construction of dams and man-made lakes and artificial enlargement of lakes with surface area of 250 hectares or more
  - Surface water fed irrigation projects covering more than 100 hectares
  - Ground water fed irrigation projects more than 100 hectares
  - River diversions and water transfers between catchment
  - Drainage area of Forestry wetlands or wildlife habitat covering an area of 10 hectares or
  - more
  - Dams and man-made impoundment in low land areas covering an area of 100 hectares or more
  - Dams or other large-scale water impoundments
  - Water drainage, abstraction, or irrigation schemes of medium- or large-scale
  - Construction of dams, impounding reservoirs with a surface area of 100 hectors
  - Ground water development for industrial, agricultural or urban water supply of greater than 4000 m3 /day
  - Canalization and flood-relief works (large scale)
  - Drainage Plans in towns close to water bodies
- **Waste Disposal Activities**
  - Waste disposal installations for the incineration, chemical treatment or land fill of toxic,
  - hazardous and dangerous wastes
  - Installation for the disposal of industrial waste
  - Land fill site for waste disposal in major urban centre
- **Urban Development Activities**
  - Hospital and educational facilities (large scale)
  - Housing development covering an area of 50 hectares or more
  - Designation of new towns, village and residential area
  - Establishment of industrial estates
  - Establishment or expansion of recreational areas in mountain areas, Parks and game
  - reserves
  - Shopping centers, complexes and establishment of open air market area in major urban centers
  - Establishment of bus and rail terminal
- **Minerals Extraction and Processing Activities**
  - Large scale Mining Operation, which the annual run of mine ore exceed:-

    a. Gold, platinum and silver and other precious and semi precious minerals.

    - 100,000m3 for placer operation
    - 75,000 tons for primary deposit mining

    b. Metallic minerals such as Iron, Lead, Copper, Nickel

    - 150,000 tons for open pit mining
    - 75,000 tons for underground mining operations

    c. Industrial minerals such as kaolin, bentonite, diatomite, dolomite, quartz and coal

    - 120,000 tons

    d. Construction Minerals

    - 80,000m3 for sand, gravel, pumice, stone, clay and the like
    - 10,000m3 for dimension stones such as marble and granite

    e. Mineral Water

    - 20,000m3

    f. Thermal Water

    - 2,000,000m3 for bathing, recreational and medicinal purposes
    - 25 Mega Watt, or geothermal steam capable of generating equivalent power for industrial and other purposes

    g. Extraction of salts from brines

    - 14,000 tons

    h. Large scale quarry site of construction minerals near to large population centre.
- **Petroleum Development Related Activities**
  - Oil and gas fields development
  - Construction of off shore pipe lines in excess of 50 km in length

- Construction of oil and gas separation, processing, handling and storage facilities
- Construction of product depots for storage of petroleum, gas or diesel (excluding service stations) which are located within 3 km of any commercial or residential areas and which have a combined storage capacity of 60,000 barrels or more

- **Industrial Activities**
  - Petrochemicals - (all size)
  - Chemical where production capacity of each product or of combined products is greater than 50 tons/day
  - Installations for the production of ferrous and non-ferrous metals, including smelting, refining, drawing rolling and surface treatment (all size)
  - Installations for the extraction and processing of asbestos and cement products
  - Manufacture or transport of pesticides or other hazardous and/or toxic materials
  - Manufacturing of agricultural chemicals in puts (all sizes)
  - Agro industry (large scale) such as sugar cane industries
  - Beverage industries (large scale)
  - Textile industries (large scale)
  - Manufacture of rubber and plastic products (large scale)
  - Manufacture of glass and glass products (large scale)
  - Manufacture of electrical machinery apparatus, appliances and supplies
  - Manufacture of wood and wood products, including furniture (large scale)
  - Tannery and leather dressing factories (large scale)
- **All projects in environmentally sensitive areas should be treated under Schedule 1 irrespective of the nature of the project.** Sensitive areas may include:
  - Land prone to erosion
  - Land prone to desertification
  - Areas which harbour protected, threatened or endangered species
  - Areas of particular historic or archaeological interest
  - Primary forests
  - Wetland of national or international importance
  - National Park and protected area
  - Important landscape
  - Religiously important area

Example Activities: Schedule 2

- Maintenance or rehabilitation of roads, airstrips and other infrastructure such as housing and commercial projects, cemetery site and establishment of religious institutions
- Construction of new minor roads and medium-scale infrastructure such as public utilities
- Upgrading or rehabilitation of major rural roads
- Airports with basic runway length less than 2,100m
- Agro-industry projects of small and medium-scale such as:
  - Manufacturing of vegetable and animal oils and fats
  - Manufacture, packing and canning of animal, fish and vegetable products
  - Industries utilizing hazardous materials (small scale)
- Small scale recycling plant
- Small-scale dams and water impoundment, irrigation, drainage and sewerage systems
  - Surface water fed irrigation projects covering less than 100 hectares
  - Ground water fed irrigation projects covering less than 100 hectares
- Medium-scale agricultural projects such as wide spread introduction of fertilizers and Pest control programmes (large scale)
- Forestry activities such as Protected forest reserves (large scale), Agro forestry (large scale), Productive forest reserves (large scale)
- Livestock and Fishery activities such as:
  - Intensive rearing of cattle (>50 heads); pigs (>100 heads); or poultry (>500 heads)
  - Establishment of animal feed (large scale)

- Livestock fattening projects (large scale)
- Bee keeping projects (large scale)
- Artesian fisheries (large scale)
- Introduction of new harvesting technology

- Energy projects such as:
  - Small and medium-scale wind and solar farms
  - Small-scale bio-energy development
  - Thermal power stations and other combustion installations with a heat output of less than 300 mega watts
  - Electricity transmission lines
  - Hydropower projects having dam height less than 15 meters and reservoirs with a surface area less than 250 hectares

Example Activities: Schedule 3

- Scholarships
- Technical assistance
- Workshops and meetings
- Research and extension in natural resources
- Replacement small-scale infrastructure (e.g. new electricity pylons) and maintenance of existing installations
- Capacity and institutional strengthening
- Health and education programmes that do not include infrastructure
- Business mentoring
- Educational facilities (small scale)
- Audio visual production
- Training and teaching facilities and equipment
- Medical centre (small scale)
- Medical supplies and equipment
- Nutrition and family planning
- Surface water fed irrigation projects covering less than 50 hectares
- Ground water fed irrigation projects covering less than 50 hectares
- All projects involved in environmental enhancement programmes
- All small scale agricultural activities
- Protected forest reserves (small scale)
- Productive forest reserves (small scale)
- Rearing of cattle (<50 heads); pigs (<100 heads), or poultry (<500 heads)
- Livestock fattening projects (small scale)
- Bees keeping projects (small scale)
- Artesian fisheries (small scale)
- Agro industrial (small scale)
- Other small scale industries having no impact to the environment
- All trades except trade in endangered species and hazardous material
- Programme assistance, non-project or special country support and food aid
- Assistance to refugee returned and displaced person

# *Appendix 5: Terms of Reference for an Environmental and Social Impact Assessment*

The following technical information can be used to generate terms of reference for an environmental and social impact assessment.

### *1. Personnel and Experience*

Environment Specialist and/or Social Specialist (International, [X] person-months)

The Specialist(s) will have at least 10 years' experience in environmental and/or social impact assessments preferably in the [X] sector. The specialist will spend approximately 75% of the time in country.

### *2. Scope of Work*

The work of the Specialist will consist of the following:

(i) Prepare the environmental and/or social impact assessment for the Project in accordance with relevant regulatory requirements in [country] and MFAT's Environmental and Social Impacts Operational Policy.

(ii) Specific assessment tasks include:

- ❖ environmental baseline conditions including: ecology; geology; air and water quality; noise; rare, threatened, or endangered species; protected areas, and other ecologically-sensitive habitats that may be affected by the Project;
- ❖ socio-cultural and economic information, including identification of possible cultural heritage and archaeological sites;
- ❖ potential direct, indirect, induced and cumulative impacts from the Project's preconstruction, construction, and operations phases and presentation of detailed measures to mitigate impacts to acceptable levels;
- ❖ potential impacts of climate variability, climate change, and natural hazards on the Project, and recommendations for any design measures to build resilience;
- ❖ disclosure of draft documents and consultation with affected people and stakeholders;
- ❖ assessment of the institutional capacity of the Project proponent and relevant regulatory agencies to implement the Project's impact management plan. If capacity deficiencies exist, prepare TOR for capacity building that helps strengthen country capacity to conduct their impact management responsibilities.

(iii) Assist government of [X] to seek clearance of the impact assessment with the relevant national and local regulatory agencies.

### *3. Outputs*

The assessment's written outputs will include:

(i) Environmental and/or social impact assessment to include impact management plan

(ii) Summaries of key findings as requested for inclusion in official MFAT documents

# *Appendix 6: Examples of significance scoring and ranking system*

**Table 6:** Example significance scoring system

| Magnitude | Duration | Scale | Probability |
|---|---|---|---|
| 10 Very high/unknown | 5 Permanent | 5 International | 5 Definite/unknown |
| 8 High | 4 Long term* | 4 National | 4 High probability |
| 6 Moderate | 3 Medium term** | 3 Regional | 3 Medium probability |
| 4 Low | 2 Short term*** | 2 Local | 2 Low probability |
| 2 Minor | 1 Transient | 1 Site only | 1 Improbable |
| | | | 0 No chance of occurrence |

**impact ceases after closure of activity **5 to 15 years ***0 to 5 years*

**Table 7:** Example significance ranking scheme

| Value | Significance | Significance |
|---|---|---|
| SP > 75 | Indicates **high** environmental and/or social significance | The degree of change (or impact) that the project may have upon the environment and/or the community(s) is unacceptably high. It is unlikely that an impact of this magnitude can be satisfactorily mitigated. If this impact cannot be avoided, the project is unlikely to be permitted for development. |
| SP 30-75 | Indicates **moderate** environmental and/or social significance | The degree of change (or impact) that the project may have upon the environment and/or the community(s) is high. The project may be compromised if this impact cannot be avoided or mitigated (i.e. to reduce the significance of the impact). |
| SP < 30 | Indicates **low** environmental and/or social significance | The degree of change (or impact) that the project may have upon the environment and/or the community(s) is relatively low. Opportunities to avoid or mitigate the impact should be considered; however, this should not compromise the viability of the project. |
| | **Positive impact** | The changes will have a positive benefit upon the existing environment and/or the community(s). |

## *Appendix 7: Components of an environmental and social management plan (ESMP)*

**The following aspects should typically be addressed within an ESMP**

I. ***Summary of the potential impacts of the proposed project***: The predicted adverse environmental and social impacts for which mitigation is required should be identified and briefly summarized. Cross-referencing to the ESIA report or other documentation is recommended.

II. **Description of the recommended mitigation measures:** Each mitigation measure should be briefly described with reference to the impact to which it relates and the conditions under which it is required (for example, continuously or in the event of contingencies). These should be accompanied by, or referenced to, project design and operating procedures that elaborate on the technical aspects of implementing the various measures.

III. **Description of monitoring and auditing program:** The monitoring and auditing programs should clearly indicate the linkages between impacts identified in the ESIA report, measurement indicators, detection limits (where appropriate), and definition of thresholds that will signal the need for corrective actions.

IV. **Institutional arrangements**: Responsibilities for mitigation and monitoring should be clearly defined, including arrangements for co-ordination between the various actors responsible for mitigation.

V. **Capacity Building and Training Programmes:** To support timely and effective implementation of the project components and mitigation measures, an assessment and evaluation of the capability of environmental units and other institutions responsible for environmental management is necessary.

VI. **Implementation schedule and reporting procedures:** The timing, frequency and duration of mitigation measure should be specified in an implementation schedule, showing links with overall project implementation. Procedures to provide information on the progress and results of mitigation and monitoring measures should also be clearly specified.

VII. **Cost estimates and sources of funds and allocation of responsibilities**: These should be specified for both the initial investment and recurring expenses for implementing all measures contained in the ESMP, integrated into the total project costs, and factored into loan negotiations, etc.

## *Appendix 8: Example of Impact Management Matrix*

| IMPACT | MITIGATION | RERSPONSIBLE INSTITUTION | TIME FRAME | ESTIMATED COST (ETB) |
|---|---|---|---|---|
| **Community health** Contact between workers and villagers may increase cases of communicable sexually transmitted diseases including HIV/AIDS as well as malaria and cholera. | • Accommodate all the project and contractor staff at the project facilities on the project site;<br>• Restrict movement or interaction of the contractor staff with the villagers;<br>• Use video displays to show the impact of HIV/AIDS to the islanders | Proponent/Project developer in collaboration with regional/ Local Government Authority | Throughout project construction and operation phases/period. | To be estimated |
| **Health of workers** Workers may experience problems of airborne dust, fires and accidents from the contractor works if they occur may affect the workers. | In order to safeguard the workers' health from exposure to PCBs during excavation near switch yard, workers will be provided with proper protective gear as recommended by General Health and Safety Guidelines. | Proponent/Project developer | Throughout project construction and operation period | To be estimated |
| **Existing unsafe facilities:** These include the wooden wharf and the concrete jetty. The wooden wharf needs to be demolished and the concrete jetty to be repaired. | The wooden wharf shall be demolished since it is in poor condition. The concrete jetty shall be repaired to ensure that it is safe for construction and future use. | Proponent/Project developer | To start during project imitation and during construction period | To be estimated |
| **New Claims** During the construction phase new compensation claims for crops and land acquisitions may surface. These should be handled with care as they could affect people's lives and cause loss of income. | Project proponent shall establish system to handle such claims on a fair and adequate basis. A full ongoing and up to date list of all claims or complaints will be maintained by proponent and responses rendered. | Proponent/Project developer in collaboration with regional/ Local Government Authority | Throughout construction period. | To be estimated |

Source: National Environment Management Council (NEMC) of Tanzania, 2005

## *Appendix 9: Administrative Review Checklist*

| Part 1 | **Administrative Review Checklist for IEE and ESIA Reports** | |
|---|---|---|
| | ***Does the report comply with administrative requirements?*** | **Comment** |
| | Has the Project Developer endorsed the report? | |
| | Are the names/credentials of the study team given? | |
| | Does the report comply with the ***format and basic requirements*** specified in regulations / guidelines? | |
| | Does the report provide a Table of Contents? | |
| | Are the typical report components (and sub-components) included? (e.g., Does the report have these sections: executive summary, introduction, policy and legal framework, project description, alternatives, description of the biophysical and social environment, impact identification and assessment, mitigation and residual impacts and enhancement measures, management plan, and stakeholder comments?) | |
| | Has the Project Developer used Appendix 1 & 2 (and any relevant sub-plan checklist) to check the completeness and technical quality of his/her submission? | |
| | Does the report provide a copy of the **minutes** (with consultation dates, list of participants & telephone numbers including their signature) of the necessary consultation meetings (e.g., village level and/or district level meetings), the methods used e.g. Focus group discussions conducted with women, elders, youth and vulnerable and marginalized group etc. signed by the respective administrative body , Project Developer and the Consulting Firm? | |
| | ***ESIA:*** Does the report comply with the TORs? | |
| | ***Is the report presentation of good quality?*** | **Comment** |
| | Does the report provide an Executive Summary in Local language and in English? | |
| | Does the Executive Summary summarize the whole report, using simple, clear language? | |
| | Does the report provide a complete list of Acronyms? | |
| | Is the report logically organized and clearly structured (e.g., differentiates construction phase issues from operational phase issues; are topics presented in the correct section of the report)? | |
| | Is the presentation comprehensive, but concise, avoiding irrelevant information? | |
| | Does the report make effective use of tables, figures, **maps,** and other graphics? | |
| | Are the maps, tables, figures, and other graphics correct and adequate? | |
| | Are the maps, tables, and figures correctly labelled with an adequate legend? | |
| | Does the report make effective use of annexes to present detailed data not essential to understanding the main text? | |
| | Are the sections of the report integrated and consistent? | |
| | Does the report read as a single document, with cross references between sections? | |
| | Is the **methodology** explained? | |

| | | |
|---|---|---|
| | Are all analyses and conclusions adequately supported with data and evidence? | |
| | Are information gaps acknowledged? | |
| | Are all sources of data properly referenced, including expert judgments and public opinions? | |
| | Is there any evidence that the IEE/ESIA was 'copied' from other reports? | |
| | Does the report document who was consulted, when, and how they were consulted and does it summarize the comments received? | |
| | **ADMINISTRATIVE REVIEW:** ***Is the report complete and of good quality?***<br>***If yes, proceed to Part 2, Technical Content Review.*** If no, return to Project Developer for revisions. | |

## *Appendix 10: Technical Content Review Checklist*

| | | |
|---|---|---|
| **Part 2** | **Technical Content Review Checklist for IEE or ESIA Reports** | |
| | **Executive Summary:** | **Comment** |
| | ***Does the executive summary provide an adequate non-technical summary using maps and other graphics where appropriate of the:*** | |
| | Policy and legal framework | |
| | Project description | |
| | Alternatives | |
| | Environmental and social baseline | |
| | Predicted significant impacts | |
| | Study methods for completing the baseline, impact identification, and assessment; & related data gaps and uncertainties | |
| | Proposed mitigation and compensation measures | |
| | Enhancement measures; | |
| | Environmental and Social Management Plan (ESMP) | |
| | Costs related to mitigation, compensation, and monitoring | |
| | Public consultation | |
| | **Policy and Legal Framework:** | **Comment** |
| | ***Does the report adequately summarize the policy and legal framework?*** | |
| | Is the legislation governing the Project clearly identified? | |
| | Are all relevant (up-to-date) regulations reviewed (e.g., Forestry Law; ESIA regulation, etc)? | |
| | Does the report refer to applicable national and international standards, norms, and agreements (e.g., Biodiversity Convention)? | |
| | **Project Description:** | **Comment** |
| | ***Does the report adequately describe the Project, using appropriate maps and diagrams?*** | |
| | Are the Project objectives clearly described? Is the Project clearly justified? | |
| | Is the Project implementation process adequately described (i.e., estimated duration, and start and finish dates for design, construction, operation, and decommissioning phases)? | |
| | Are all design-phase activities described? | |
| | Are all construction-phase activities described? | |
| | Are all operational-phase activities described? | |

| | | |
|---|---|---|
| | Are all decommissioning-phase activities described? | |
| | Are the main temporary (e.g., construction phase) Project components described, quantified, and located on an appropriately-scaled map? | |
| | Are the main permanent (e.g., operation phase) Project components described, quantified, and located on an appropriately-scaled map? | |
| | Are the main decommissioning-phase Project components described, quantified, and located on an appropriately-scaled map? | |
| | Is the layout of the Project described and located on appropriately-scaled maps (including all sites, buildings, physical structures, storage facilities, & access roads)? | |
| | Are all services required for the Project described and quantified [e.g., staff requirements (local and foreign), water, sewerage, waste disposal, and traffic movements]? | |
| | If the Project will displace people or businesses, are the numbers and socio-economic conditions or characteristics of project-affected-persons described? | |
| | Are the legal restrictions regarding the Project's location indicated, such as other development plans, protected areas, or national monuments? | |
| | Are the Project inputs, processes, and outputs described and quantified (to the extent possible) for ***all*** Project phases (design, construction, operation, & decommissioning)? Specifically, does the report outline the Project's use of materials, waste products, and what it will produce, as itemized below: | |
| | Type / quantity of what it needs in terms of:<br>□ Raw materials;<br>□ Energy;<br>□ Water;<br>□ Hazardous materials;<br>□ Extraction processes;<br>□ Jobs (type/quantity) created and related workforce services;<br>■ Traffic movements. | |
| | Type, quantity, and technology/methods/location to reduce, manage, treat and dispose of *all* Project-related ***waste*** products:<br>□ Air emissions;<br>□ Solid wastes;<br>□ Liquid wastes;<br>□ Hazardous wastes;<br>□ Noise, heat, light, or radiation. | |
| | □ Type / quantity of ***products*** produced. | |

| | | |
|---|---|---|
| | Are the Project-related risks discussed?<br>□ Risks related to: natural disasters, climate change, hazardous materials, spills, fire, explosion, accidents, and design failure? | |
| | □ Are measures to prevent and respond to accidents and abnormal events described (e.g., is there an emergency response plan)? | |
| | **Alternatives:** | **Comment** |
| | ***Are realistic and relevant Project alternatives described and compared and is the selected alternative a reasonable choice?*** | |
| | Is the baseline situation in the No-Project situation described? | |
| | Are the main environmental effects of the alternatives compared with those of the proposed Project? | |
| | Are the main reasons for choosing the proposed Project explained, including any environmental reasons for choosing this alternative? | |
| | **Description of the biophysical environment likely to be affected by the Project:** | **Comment** |
| | ***Is the biological, physical, and social environment likely to be affected by the Project sufficiently described and mapped?*** | |
| | Is the *physical* environment described and mapped adequately? *When relevant*, aspects related to:<br>□ Water / hydrology;<br>□ Soil;<br>□ Topography;<br>□ Geology;<br>□ Landscape;<br>□ Climate/climate change;<br>□ Current level of air, water, or soil pollution, and noise level? | |
| | Is the *biological* environment described and mapped adequately? W*hen relevant*, aspects related to:<br>□ Flora;<br>□ Fauna;<br>□ Rare and endangered species;<br>□ Ecosystem/habitats;<br>□ Biodiversity;<br>□ Ecosystem services and ecosystem function;<br>□ Protected areas? | |
| | □ **Is the *social* environment described and mapped adequately? *When relevant*:** | |

| | | | |
|---|---|---|---|
| | □ Historic sites;<br>□ Archaeology;<br>□ Cultural resources and habits;<br>□ Health;<br>□ Demographic aspects;<br>□ Gender;<br>□ Poverty level;<br>□ General welfare;<br>□ Current resource use (including tourism, mines, community resources/assets, e.g., drinking water and non-forest products);<br>□ Infrastructure (include road transport, navigation, irrigation, community services, including schools, health centres, and religious buildings);<br>□ Property;<br>□ Socio-economic aspects (e.g., current employment and education level, livelihood situation)? | | |
| | **Employment and labour markets** | Does the project facilitate new job creation? | |
| | | Does it have specific negative consequences for particular professions, groups of workers, or self-employed persons? | |
| | | Does it affect particular age groups? | |
| | | Does it affect the demand for labour? | |
| | | Does it have an impact on the functioning of the labour market? | |
| | | Does it have an impact on the reconciliation between private, family and professional life? | |
| | **Standards and rights related to job quality** | Will it affect workers' health, safety and dignity? | |
| | | Does the project directly or indirectly affect workers' existing rights and obligations, in particular as regards information and consultation within their undertaking and protection against dismissal? | |
| | **Social inclusion and protection of particular groups** | Does it lead directly or indirectly to greater equality or inequality? | |
| | | Does it affect equal access to services and goods? | |
| | | Does the project affect specific groups of individuals (for example the most vulnerable or the most at risk of poverty, children, women, elderly, the disabled, unemployed or ethnic, linguistic and religious minorities), firms or other organisations (for example churches) or localities more than others? | |

| | | | | |
|---|---|---|---|---|
| | **Gender equality, equality treatment and opportunities, non -discrimination** | Does the project affect the principle of non-discrimination, equal treatment and equal opportunities for all? | | |
| | | Does the project have a different impact on women and men? | | |
| | | Does the project promote equality between women and men? | | |
| | | Does the project entail any different treatment of groups or individuals directly on grounds of sex, racial or ethnic origin, religion or belief, disability, and age? Or could it lead to indirect discrimination? | | |
| | **Individuals, private and family life, personal data** | Does the project impose additional administrative requirements on individuals or increase administrative complexity? | | |
| | | Does the project affect the privacy, of individuals (including their home and communications)? | | |
| | | Does it affect the right to liberty of individuals? | | |
| | | Does it affect family life or the legal, economic or social protection of the family? | | |
| | | Does it affect the rights of the child? | | |
| | **Governance, participation, good administration, access to justice, media and ethics** | Does the project affect the involvement of stakeholders in issues of governance as provided for in the Treaty and the new governance approach? | | |
| | | Are all actors and stakeholders treated on an equal footing, with due respect for their diversity? | | |
| | | Does the project impact on cultural and linguistic diversity? | | |
| | | Does it affect the individual's access to justice? | | |
| | | Does it foresee the right to an effective remedy before a tribunal? | | |
| | | Does the project make the public better informed about a particular issue? | | |
| | | Does it affect the public's access to information? | | |
| | **Public health and safety** | Does the project affect the health and safety of individuals/populations, including life expectancy, mortality and morbidity, through impacts on the socio-economic environment (working environment, income, education, occupation, nutrition)? | | |
| | | Does the project increase or decrease the likelihood of health risks due to substances harmful to the natural environment? | | |
| | | Does it affect health due to changes in the amount of noise, air, water or soil quality? | | |

| | | | |
|---|---|---|---|
| | | Will it affect health due to changes energy use and/or waste disposal? | |
| | | Does the project affect lifestyle-related determinants of health such as diet, physical activity or use of tobacco, alcohol, or drugs? | |
| | | Are there specific effects on particular risk groups (determined by age, gender, disability, social group, mobility, region, etc.)? | |
| | **Crime, Terrorism and Security** | Does the project have an effect on security, crime or terrorism? | |
| | | Does the project affect the criminal's chances of detection or his/her potential gain from the crime? | |
| | | Is the project likely to increase the number of criminal acts? | |
| | | Does it affect law enforcement capacity?<br>Will it have an impact on security interests? | |
| | | Will it have an impact on the right to liberty and security, right to fair trial and the right of defense? | |
| | | Does it affect the rights of victims of crime and witnesses? | |
| | **Access to and effects on social protection, health and educational systems** | Does the project have an impact on services in terms of quality/access for all? | |
| | | Does it have an effect on the education and mobility of workers (health, education, etc.)?<br>Does it have an effect on the safety /health condition of workers at work? /Are protective and safety equipments for workers fulfilled? / | |
| | | Does the project affect the access of individuals to public/private education or vocational and continuing training? | |
| | | Does it affect the cross-border provision of services, referrals across borders and co-operation in border regions? | |
| | | Does the project affect the financing / organisation / access to social, health and care services? | |
| | **Culture** | Does the proposal have an impact on the preservation of cultural heritage? | |
| | | Does the proposal have an impact on cultural diversity? | |
| | | Does the proposal have an impact on citizens' participation in cultural manifestations, or their access to cultural resources? | |
| | □ Is the current land use of the area to be occupied by the Project (and the surrounding area) described and mapped (including material assets and local resources that may be affected by the Project)? | | |

| | | |
|---|---|---|
| | □ Is the likely evolution of the environment without the Project described (i.e., the trends for the without-project scenario)? | |
| | □ Are the limits to the Project study area for all Project phases determined, mapped, and justified? | |
| | □ Are information gaps explained? | |
| | **Identification and Evaluation of Impacts:** | **Comment** |
| | ***Are the likely effects of the Project on the physical, biological, and social components identified, quantified (to the extent possible), and evaluated for Each project phase?*** | |
| | **Are direct effects of the Project identified and evaluated?** | |
| | □ Climate/climate change;<br>□ Current level of air, water, or soil pollution, and noise level (e.g., will the addition of this project result in a standard being breached)? | |
| | *For the biological environment? When relevant*, effects on:<br>□ Flora;<br>□ Fauna;<br>□ Rare and endangered species;<br>□ Ecosystem/habitats;<br>□ Biodiversity;<br>□ Ecosystem services and ecosystem function;<br>□ Protected areas? | |
| | *For the social environment? W*hen *relevant*, effects on:<br>□ Historic sites;<br>□ Archaeology;<br>□ Cultural resources and habits;<br>□ Religious aspects/entities<br>□ Health;<br>□ Demographic aspects;<br>□ Gender;<br>□ Poverty level;<br>□ General welfare;<br>□ Current resource use (including tourism, mines, community resources/assets, e.g., drinking water and non-forest products);<br>□ Infrastructure (include road transport, navigation, irrigation, community services, including schools, health centres, and religious buildings);<br>□ Property; | |

| | | |
|---|---|---|
| | □ Socio-economic aspects (e.g., current employment and education level)? | |
| | □ Land use | |
| | **Are indirect and other effects of the Project identified and evaluated?** | **Comment** |
| | □ Are indirect or secondary effects identified (e.g., effects on fauna, flora, or habitats caused by Project-related soil, air, noise, or water pollution)? | |
| | □ Are cumulative and synergistic effects identified where practicable? | |
| | □ Are effects caused by *ancillary* activities to the main project described (ancillary activities are part of the project, but usually take place away from the main Project location e.g., construction of access routes and infrastructure, traffic movements, mining of aggregates or other raw materials, generation and supply of power, and/or disposal of effluents or wastes)? | |
| | □ Are risks identified, quantified to the extent possible, and evaluated? | |
| | □ Are effects which could result from *accidents*, abnormal events, or exposure of the Project to natural or human-made disasters described and where appropriate quantified? | |
| | □ Are inter-relationships between effects considered where practicable? | |
| | Are all impacts sufficiently characterized and the significance of Each predicted effect discussed for ***Each project phase***? N.B. Impact significance generally considers the impact characteristics listed below, making a final judgment of 'significance' usually based on impact magnitude and importance.<br>**Impact characteristics:**<br>□ Positive vs. negative?<br>□ Geographic extent (local vs. global);<br>□ Duration (temporary vs. permanent; short-term vs. long term);<br>□ Frequency (continuous vs. infrequent);<br>□ Reversibility vs. irreversible;<br>□ Probability (high vs. low)?<br>□ Magnitude (high vs. low)? | |
| | Are all ***design phase impacts*** characterized and evaluated using the impact characteristics shown above? | |
| | Are all ***construction phase impacts*** characterized and evaluated using the impact characteristics shown above? | |
| | Are all ***operational phase impacts*** characterized and evaluated using the impact characteristics shown above? | |
| | Are all ***decommissioning phase impacts*** characterized and evaluated using the impact characteristics shown above? | |
| | Are significant project impacts adequately ranked and appraised? | |

| | Data Quality and Methodology for Baseline Data Collection, Surveys, Impact Identification, Prediction, and Assessment: | Comment |
|---|---|---|
| | ***Were the methods used to conduct the study described and were they adequate, systematic, and quantitative (to the extent possible)?*** | |
| | Has the study area been defined widely enough to cover all the area likely to be significantly affected by the Project, including any trans-boundary issues? | |
| | Is the choice of study methods explained and appropriate? | |
| | Are the methodologies to complete the *baseline* described & are they adequate to the purpose and applied correctly? | |
| | Is the *impact identification method* described? Is it appropriate? | |
| | Are impact prediction methods described? Are they appropriate? | |
| | Is the *impact assessment* method described and is it appropriate? | |
| | Is the basis to evaluate the significance & importance of impacts clearly described? Are the geographic extent, duration, frequency, reversibility, magnitude, and probability of Each impact identified as appropriate, and used to determine 'significance'? | |
| | Does the discussion focus on the key issues / significant impacts of the Project and avoid unnecessary information? | |
| | Are the conclusions of the assessment clear and logical? | |
| | Is the data quality appropriate (e.g., primary and recent data for all the important processes)? | |
| | Are assumptions related to the methodology and data identified? | |
| | Are any uncertainties/gaps explained? Are assessments subjected to sensitivity analysis or scenario evaluation, where relevant? | |
| | To the extent possible, are significant impacts presented on a map? | |
| | **Mitigation Measures and Residual Impacts:** | **Comment** |
| | ***Are there appropriate mitigation measures to prevent, reduce, and compensate all identified significant impacts? Are the residual impacts acceptable?*** | |
| | Where there are significant adverse effects on the biophysical and social environment, is the potential to mitigate discussed, including measures to (in order of priority):<br>□ Reduce or avoid impacts by alternative strategies or locations;<br>□ Change the Project design and layout;<br>□ Change the methods and processes;<br>□ Treat and manage waste;<br>□ Change the implementation plan and management practices;<br>□ Repair or remedy impacts; and/or Compensate impacts? | |

| | | |
|---|---|---|
| | Are there mitigation measures proposed for all significant impacts? | |
| | Are the measures clearly described and their effect on the magnitude and significance of impacts clearly explained? | |
| | Where mitigation of significant adverse effects is not practicable or the Project Developer has chosen *not* to propose any mitigation, are the reasons for this clearly explained? | |
| | Is there an adequate, sufficiently detailed risk-prevention and contingency program in case of accidents? | |
| | Are any negative effects of the proposed mitigation described? | |
| | Are residual impacts described? i.e., Are impacts described on the basis that all proposed mitigation measures were implemented? | |
| | Are the residual impacts acceptable? By implementing the Project, do the environmental parameters still meet the national environmental standards? | |
| | What additional measures or conditions are needed to further mitigate the negative impacts of the Project? | |
| | **Enhancement measures& other environmental protection measures:** | **Comment** |
| | For impacts predicted to be positive, are enhancement measures to increase the positive impacts proposed (e.g., local job training)? | |
| | What additional measures or conditions are needed to further enhance the positive effects of the Project? | |
| | **Environmental and Social Management Plan (ESMP)** | **Comment** |
| | ***Does the report provide an adequate EMMP/SMMP and is it implementable?*** | |
| | Does the report provide a well-structured ESMP? | |
| | Are all the significant impacts identified in the impact identification chapter addressed in the ESMP? | |
| | Were all necessary protection measures included in the ESMP? | |
| | Are the proposed mitigation measures and other protection measures likely to be effective and adequate? | |
| | Are risks identified? Is there an adequate emergency response plan in case of accident or failure? | |
| | Is there a contingency plan and budget for unanticipated impacts? | |
| | Is a budget included to implement ***all*** identified mitigation and compensatory measures and enhancement measures? | |
| | Is there a binding commitment on the part of the Project Developer to carry out the indicated control measures? | |

| | | |
|---|---|---|
| | Is there a detailed schedule for implementing the mitigation measures and any other environmental protection measure? | |
| | Are the responsibilities and the budget to implement the mitigation measures clearly defined? | |
| | **Monitoring Plan (MP) (extra focus):** | **Comment** |
| | ***Does the report provide adequate provisions for monitoring?*** | |
| | Is there an adequate monitoring plan (for the Project Developer and for Government), especially where impacts are uncertain? | |
| | Are the requirements for monitoring outlined, including:<br>□ Tasks and frequency?<br>□ Operational budget?<br>□ Clear institutional responsibilities for Each identified task? | |
| | Is the monitoring plan clear, practical, & linked to the significant impacts identified for the design, construction, operation, & decommission phases? | |
| | Are there provisions to revise the ESMP (and get it approved by MEFCC) in the case where there are un-anticipated impacts? | |
| | Are there provisions to revise the ESMP (and get it approved by MEFCC) 6 months before the start of the operational phase? | |
| | Are there provisions to periodically revise the ESMP every 2–3 years (and approved by MEFCC) during the operational phase? | |
| | Is there an adequate budget to finance the monitoring program? | |
| | Does the ESMP provide the means and a procedure to manage un-anticipated adverse effects? | |
| | **Consultation Process:** | **Comment** |
| | Was the IEE/ Scoping/ESIA's consultation process adequate? Is the consultation plan for the ESMP adequate? | |
| | Were relevant stakeholders at national and local level consulted to:<br>□ Set the TORs of the ESIA.<br>□ Collect the baseline information.<br>□ Identify and evaluate impacts and mitigation measures?<br>□ Identify environmental management and monitoring measures. | |
| | Does the IEE/ Scoping/, ESIA report provide a list of Consultees & meeting minutes (e.g., a summary of the date/location of the meetings, the comments made, and contact numbers)? | |
| | Is there a participation plan (with budget) and an explanation of how/when stakeholders (both public and government agencies) will be involved in the ESMP and in the | |

| | | |
|---|---|---|
| | implementation of monitoring? | |
| | **TECHNICAL CONTENT REVIEW: Based on the above assessments:** | |
| 2 | **What additional information is needed?** | |
| | **What additional measures or conditions are needed to develop and implement the IEE**// Scoping/ **ESIA?** | |
| | If the content is appropriate & sufficient, proceed to Part 3, Project Decision Review. If no, return to Project Developer for revisions. | |

## *Appendix 11: Project-decision review checklist*

| Part 3 | Project-Decision Review Checklist for IEE or ESIA Reports | |
|---|---|---|
| | ***N.B. This part of the review goes beyond just looking at the content/pieces of the report; it looks much more closely at the ESMP and consultation process. It looks at the project as a whole. It assesses whether adequate safeguards to protect the environment are in place and whether they are likely to be implemented by the Project Developer.*** | |
| | **Environmental and Social Management Plan (ESMP)** | **Comment** |
| | ***Does the report provide an adequate Environmental and Social Management Plan (ESMP) and is it implementable?*** | |
| | Does the report include a well-structured ESMP? | |
| | Were all necessary protection measures included in the ESMP? | |
| | Are the proposed mitigation measures and other protection measures likely to be effective and adequate? | |
| | Are risks identified? Is there an adequate emergency response plan in case of accident or failure? | |
| | Is there a contingency plan and budget for unanticipated impacts? | |
| | Is a budget included to implement ***all*** identified mitigation and compensatory measures and enhancement measures? | |
| | Is there a binding commitment on the part of the Project Developer to carry out the indicated control measures? | |
| | Is there a detailed schedule for implementing the mitigation measures and any other environmental protection measure? | |
| | Are the responsibilities and the budget to implement the mitigation measures clearly defined? | |
| | Is the Project as described sustainable and implementable? ***Have all significant impacts been resolved?*** Does it safeguard:<br>□ The physical environment?<br>□ The biological environment?<br>□ The social environment? | |
| | What additional measures or conditions are needed to safeguard the *physical* environment? | |
| | What additional measures or conditions are needed to safeguard the *biological* environment? | |
| | What additional measures or conditions are needed to safeguard the *social* environment? | |
| | What additional measures or conditions are needed to further enhance the positive effects of the Project? | |
| | **Monitoring Plan (MP) (extra focus)** | **Comment** |
| | ***Does the report provide adequate provisions for monitoring?*** | |
| | Is there an adequate monitoring plan (for the Project Developer and for Government Authorities), especially where impacts are uncertain? | |
| | Is the monitoring plan clear, practical, and linked to all the significant impacts identified for the design, construction, operation, and decommission phases? | |
| | Are there provisions to revise the ESMP (and get it approved by MEFCC) in the case where there are un-anticipated impacts? | |
| | Are there provisions to revise the ESMP (and get it approved by MEFCC) 6 months before | |

| | | |
|---|---|---|
| | the start of the operational phase? | |
| | Are there provisions to periodically revise the monitoring program every 2–3 years (and get it approved by MEFCC), during the operational phase? | |
| | Is there an adequate budget to finance the monitoring program? | |
| | Does the monitoring program provide the means and a procedure to manage un-anticipated adverse effects? | |
| | What additional measures or conditions are needed to facilitate the monitoring system of the Project? | |
| | **Consultation Process** | **Comment** |
| | ***Was the IEE/ESIA's consultation process adequate? Is the consultation plan for the EMMP/SMMP adequate?*** | |
| | Were relevant stakeholders at national and local level consulted to:<br>□ Set the TORs of the ESIA?<br>□ Collect the baseline information?<br>□ Identify and evaluate impacts and mitigation measures?<br>□ Identify environmental management and monitoring measures? | |
| | Does the IEE/ESIA report provide a list of Consultees & a summary of the date/location of the meetings and the comments made? | |
| | Is there a participation plan (with budget) and an explanation of how/when stakeholders (both public and government agencies) will be involved in the EMMP/SMMP and in the implementation of monitoring. | |
| | What additional measures or conditions are needed to facilitate the consultation process during Project implementation? | |
| **3.** | **PROJECT-DECISION REVIEW: Should The Project Be Approved? If Yes, Under What Conditions?** | |

## *Appendix 12: Checklist to Review a Social Development Plan (SDP)*

| 1 | **ADMINISTRATIVE REVIEW** | **Comment** |
|---|---|---|
| | Is the report complete? Does it comply with administrative requirements? Is the report presentation of good quality? (The Reviewer can refer to Appendix 1 for an example of a full *Administrative Review Checklist*). | |
| | **ADMINISTRATIVE REVIEW: Is the SDP report complete and of good quality? If yes, proceed to Part 2, Technical Content Review.** If no, return to Project Developer for revisions. | |
| **2** | **TECHNICAL CONTENT REVIEW: Does the report provide:** | **Comment** |
| | **Executive Summary and Introduction** | |
| | **Policy and legal framework, including adequate information on:** | **Comment** |
| | □ Compliance with Local laws and regulations; | |
| | □ Project development policy; | |
| | □ Compatibility with Provincial and District Development Plans; | |
| | **Environmental and social baseline, including adequate information on the area and the Affected Persons' (APs):** | **Comment** |
| | □ Natural resources management; | |
| | □ Production systems; | |
| | □ Land use and tenure; | |
| | □ Livelihood; | |
| | □ Employment and income; | |
| | □ Health; | |
| | □ Education; | |
| | □ Gender issues, vulnerable groups, and ethnic minorities; | |
| | □ Villager's perception about the Project; | |
| | **Impacts:** | **Comment** |
| | □ Loss of shelter, assets, or income due to the Project; | |
| | **Compensation Measures / Entitlement matrix for:** | **Comment** |
| | □ Compensation for loss of lands; | |
| | □ Compensation for loss of structures and other immovable assets; | |
| | □ Compensation for loss of crops, trees, and other plants; | |
| | □ Compensation for loss of access to previously-used common property; | |
| | □ Compensation for loss or damage to community infrastructure; | |
| | □ Compensation for temporary/permanent losses incurred by businesses; | |
| | **Other Mitigation / Benefit or Enhancement Measures:** | **Comment** |
| | □ Livelihood training and awareness raising; | |
| | □ Livelihood development; | |
| | □ Development of infrastructure; | |
| | **Management and Monitoring Plan** | |
| **2** | **TECHNICAL CONTENT REVIEW: Based on the above assessments:** | |
| | **What additional information is needed?** | |

| | | |
|---|---|---|
| | **What additional measures or conditions are needed to develop and implement the SDP?** | |
| | If the content is appropriate and sufficient, proceed to Part 3, Project Decision Review. If no, return to Project Developer for revisions. | |
| [3] | **PROJECT-DECISION REVIEW of SDP**<br>**Does the SDP provide sufficient information about the management and monitoring plan?** | **Comment** |
| | **Institutional Arrangements:** | |
| | □ Provincial and District Committees; | |
| | □ Village Consultative & Grievance Redress Committees; | |
| | □ Project Social Management Unit; | |
| | **Consultation:** | |
| | □ Consultation and involvement of APs; | |
| | □ Grievance mechanism; | |
| | **Budget & Schedule:** | |
| | □ A reasonable Implementation Schedule; | |
| | □ Key actors for Each implementation activity; | |
| | □ An adequate budget; | |
| | **Monitoring:** | |
| | □ Monitoring and Evaluation Plan. | |
| | Is the SDP as described sustainable and implementable? ***Have all significant impacts been resolved?*** Does it safeguard the social environment? | |
| | What additional measures or conditions are needed to safeguard the *social* environment? | |
| | **PROJECT-DECISION REVIEW: Should the SDP report be approved? If yes, under what conditions?** | |

## *APPENDIX 13: Template for Summarizing Environmental and Social Monitoring/Auditing Plan*

| **Phases of the project** | **Mitigation Measure** | **Parameters To be Monitored** | **Location** | **Measurements** | **Frequency** | **Responsible institution** | **Cost** |
|---|---|---|---|---|---|---|---|
| Pre-Construction | | | | | | | |
| Construction | | | | | | | |
| Operation and Maintenance | | | | | | | |
| Decommissioning | | | | | | | |