

CRIDF 



# Environmental Assessment Guide

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## Acronyms

Acronym	Name
BAR	Basic Assessment Report
CIA	Cumulative Impact Assessment
CMP	Comprehensive Mitigation plan
CRIDF	Climate Resilience Infrastructure Development Facility
DBSA	Development Bank Of Southern Africa
DFID	UK Department for International Development
EHS	Environment, Health and Safety
EIA	Environmental Impact Assessment
EIS	Environmental Impact Statement
EMMP	Environmental Management and Mitigation Plan
EMP	Environmental Management Plan
EPVR	Environmental Pre-Viability Report
ESIA	Environmental and Social Impact Assessment
EU	European Union
IAIA	International Association of Impact Assessments
IEE	Initial Environmental Evaluation
IFC	International Finance Cooperation
MRP	Mitigation and Rehabilitation Plan
SADC	Southern African Development Community
SEA	Strategic Environmental Assessment
SE&I	Stakeholder Engagement and Influencing
SER	Simplified Environmental Report
SoW	Scope of Works
TOR	Terms of Reference
UNECE	United Nations Economic Commission for Europe
VEC	Valued Ecosystem Component

# 1 Introduction

## 1.1 Purpose

This guide was developed to facilitate the seamless integration of environmental assessment into the implementation of the Climate Resilience Infrastructure Development Facility (CRIDF) in twelve Southern African Development Community (SADC) countries in Africa. The guide provides a step-by-step process for carrying out environmental assessments at all stages of project implementation as well as a checklist of important issues to be considered. Ultimately, these assessments are intended to ensure that the projects meet the environmental laws and regulations of the respective countries in which CRIDF operates. Thus, this guide takes consideration of the differences in the environmental laws and assessment procedures relating to these southern African countries.

There are a number of internationally accepted environmental standards that have been developed by different international organizations in support of their programs, e.g., the World Bank Group International Finance Corporation (IFC), European Union, and United Kingdom's Department of International Development (DFID). In addition, each of the southern African countries has prepared environmental standards for their specific country use to varying degrees. At a regional level, the Development Bank of South Africa (DBSA) has prepared guidelines for environmental assessment for projects that they fund within southern Africa. In preparing this guide for CRIDF, reference has been made to all these and other sources such as the benchmarks set by the International Associations for Impact Assessment (<http://www.iaia.org>) to ensure that the environmental assessments are compliant with internationally accepted practices.

## 1.2 User Profile

This guide is intended for:

- environmental consultants engaged by CRIDF to implement the selected water infrastructure projects in 12 SADC countries;
- project contractors (appointed by CRIDF) who will develop the projects on behalf of the communities and governments in these countries;
- any other CRIDF experts or collaborators who are assigned to the project; and whose work overlaps or is likely to have impacts on the environment; and
- CRIDF team leaders who are assigned to direct the project teams and who have to ensure that the reports and outputs from the consultants and contractors abide by the highest acceptable standards for carrying out an environmental assessment.

## 1.3 International Best Practice for Environmental Assessments

Internationally, a number of funding institutions and donor agencies have developed guidelines for Environmental Impact assessments in a bid to ensure high standards are achieved and that the work they support is developmentally sustainable. Of note are the World Bank Group International Finance Corporation (IFC) Performance Standards on Environmental and Social Sustainability with reference to the technical World Bank Group Environmental, Health and Safety Guidelines (EHS Guidelines). These are widely used and accepted as benchmark standards for environmental assessments by most international development funding institutions and some donor agencies.

In addition, the International Association of Impact Assessments (IAIA) has produced and adopted Principles of Environmental impact assessment best practices, public participation international best practices that together with the IFC performance standards are referred to in this guide. It is from these most used standards

and good practices that this guide is based on. Users are urged to refer to the IAIA best practices and IFC Performance Standard 1 (PS1) as a benchmark of the level expected for the CRIDF projects.

The IFC Performance Standards were developed on the basis of long-term experience gained by the World Bank group in its implementation of various projects worldwide. They are designed to help identify, avoid and/or minimize harm to the physical environment as well as the people that are resident in the project implementation areas. The standards are comprehensive and divided into eight Performance Standards as: assessment and management of environmental and social risks and impacts (PS1), labour and working conditions (PS2), pollution (PS3), community health, safety and security (PS4), land acquisition and involuntary resettlement (PS5), biodiversity (PS6), indigenous peoples (PS7) and cultural heritage (PS8). Details on each of these performance standards including the EHS guidelines can be found on the IFC website [www.ifc.org/performancestandards](http://www.ifc.org/performancestandards) and <http://www.ifc.org/ehsguidelines>. While these standards are all important, PS1 is the one that has the greatest bearing on water infrastructure projects that CRIDF implements. This standard prescribes for the preparation of the environmental management programs that include social and environment action plans to ensure projects will meet the performance standards.

## 1.4 Country Legislation

Where a particular country's legislation demands more than what is required by the IFC, the consultant is obliged to meet the national standards. However, in countries where this is not the case, then the IFC standards will be adhered to. The best guiding rule is that the higher standard prevails.

## 1.5 The CRIDF Programme Objective

The Climate Resilient Infrastructure Development Facility (CRIDF) is a programme for developing water infrastructure in the Southern Africa Development Cooperation (SADC) region, covering the 12 mainland countries namely Angola, Botswana, Lesotho, Malawi, Mozambique, Namibia, South Africa, Swaziland, the Democratic Republic of Congo, Tanzania, Zambia and Zimbabwe.

CRIDF was initiated in 2012 and has run for 5 years. It is now in the second phase referred to as CRIDF II. CRIDF's aim is to deliver sustainable small to medium-scale infrastructure across the 12 countries over the next three years. The programme focuses on water services, water resource management, and water for livelihoods. CRIDF also aims to create a lasting impact by leveraging resources for a regional response to water scarcity and climate change; and to facilitate the sourcing of additional finance from other sources for the delivery of CRIDF-supported infrastructure projects. CRIDF supports projects that can be delivered relatively quickly, to demonstrate immediate benefits. Since the aim is to ensure quick delivery of projects, it also follows that the environmental assessments must be carried out efficiently, in a manner that does not hamstring project delivery.

## 2 Environmental Assessment - Importance

### 2.1 Environmental Assessment Scope

An environmental assessment is a multidisciplinary and comprehensive process of determining the potential positive and negative impacts of the project on the biophysical, social and economic aspects of the environment. Procedurally it starts with a simple screening of the project and using available information to determine the risks posed to the biophysical and social environment. It then follows a series of steps to assess the impacts and develop ways of avoiding or minimizing these impacts where possible. Ultimately, the environmental assessment process leads to development of an environmental management plan (EMP), which provides practical guidelines or prescriptions on how the project can be best managed to enhance the positive impacts while minimising or eliminating the potential negative impacts. The EMP must also provide a monitoring program for use in the implementation phase of the project, with verifiable indicators. To this end, an environmental assessment should be rigorous, transparent and consistent with the highest recognised standards and national legislation.

### 2.2 Typical Phases of an Environmental Assessment

Over the past two decades, a widely accepted process of conducting environmental assessment has emerged comprising the steps outlined below. Detailed descriptions of the activities constituting each step are presented in **Section 4**.

Phases that constitute an Environmental Assessment are as follows (the applicable CRIDF Project Cycle stage shown in brackets):-

- An initial project review or screening exercise (Scoping);
- A scoping process to prepare program of activities for the EIA as well as terms of reference for the consultants. This stage is very important as it sets the direction of the EIA process. It is carried out before the full EIA and usually before the EIA consultants are appointed. In fact, this stage is used for preparing the terms of reference for the EIA consultants. Where CRIDF does not have qualified environmental in-house staff to carry out this screening and scoping tasks, a short-term environmental consultant will be hired to assist with this short but important task, especially to prepare the terms of reference for the EIA (Pre-feasibility).
- Review of Relevant Environmental Legislation (Pre-feasibility).
- Conducting the Environmental Impact Assessment (Feasibility);
  - Baseline studies on the state of the biophysical environment, including field work;
  - Public consultation of affected communities;
- Impact Analysis (Feasibility);
- Preparation of an Environmental Management Plan (EMP) and a monitoring program (Feasibility).
- Preparation of the detailed Environmental Impact Assessment Report (Feasibility);
- Submission of the EIA report to the relevant Environmental Management Agency (Financial Closure); and
- Obtaining of the Project Environmental Management Certificate (Financial Closure).

**Figure 1** is a diagrammatic representation of an environmental assessment process in relation to project phases, showing the sequencing of the different steps and feedback loops involved in the process. The CRIDF project approach develops projects as far as the commissioning stage and hands them over for management to designated national /local institutions. As such this guide will only discuss environmental assessment stages as far attainment of certification or completion of project construction works.

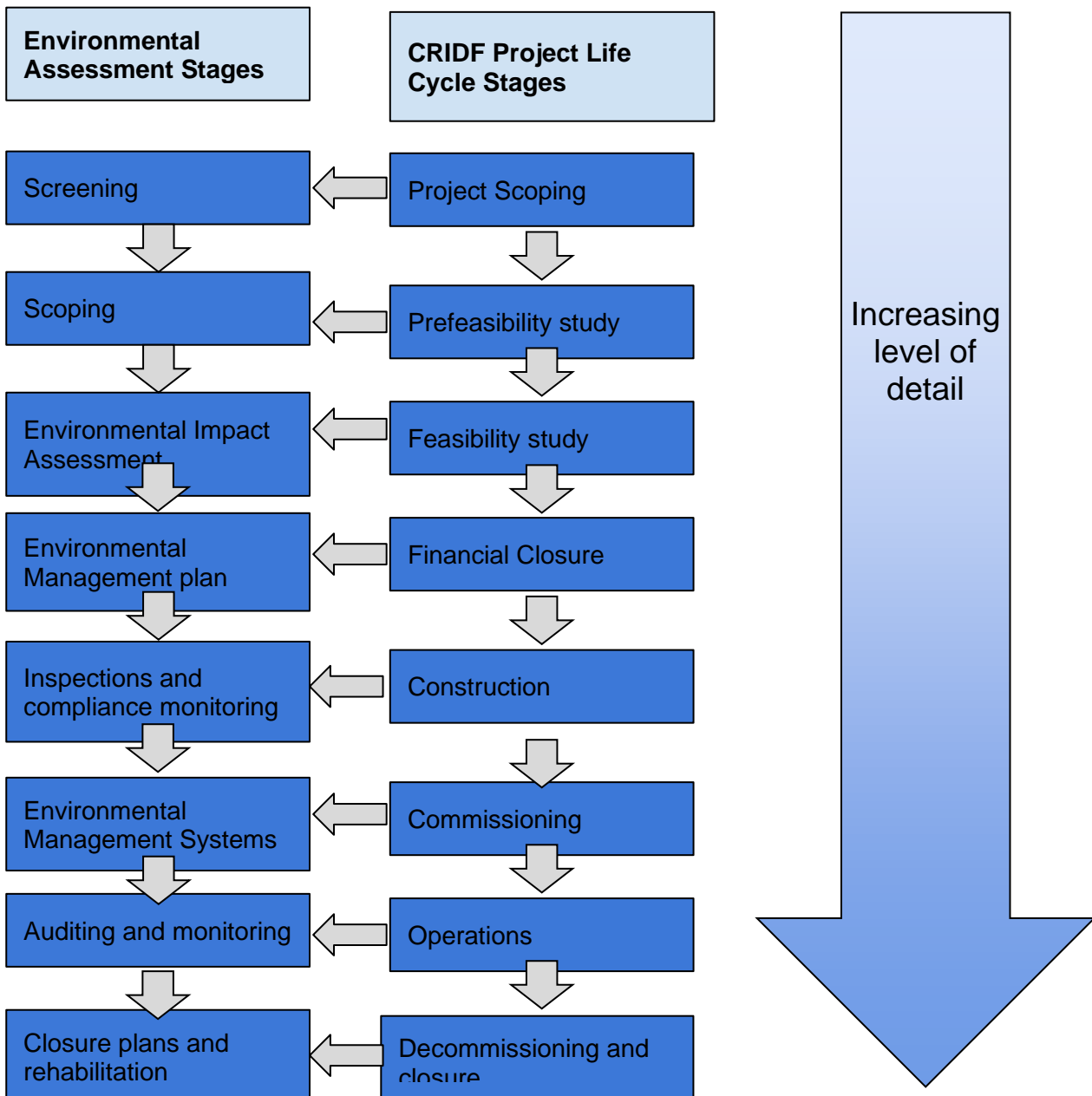


Figure 1 Environmental Assessment Stages in Relation to Project Cycle

## 2.3 Purpose of an Environmental Assessment

Environmental assessments should begin and be part of the project from the time that the project concept is mooted. It is at this stage where risks can be identified for further analysis. Environmental assessment or review processes are important for minimizing, managing and elimination environmental and social risks and impacts that infringe on the physical environment and on people. Through the various processes of the environmental assessment the aim is to end up with a project that has minimal impacts, maximum benefits and where the target community is assisted towards sustainability. These impacts can either be avoided and if they remain, are minimized through mitigation plans. It is important to also emphasize here that environmental management is not a cost to a project but can enhance the value of the project. Thus, the



sooner environmental considerations are incorporated into the project the better it is for the project outcomes especially with regards to long-term benefits and sustainability.

The stages outlined above for implementing EIA are generic. However, the terminology for referring to these stages varies across countries in the SADC. Table 1 presents the different terms used to refer to the different stages in the different SADC countries.

**Table 1 EIA Stages / Terminology in SADC (Adapted from Walmsley & Patel 2011)**

Country	Screening	Scoping	EIA	Permit, License, Authorisation	EMP	Follow-up
World Bank	Screening	Scoping	EIA		EMP	
Angola	Screening		Environmental Impact Statement (EIS) and EMP	Environmental License	Included in EIA	Monitoring of EIA Implementation
Botswana	Screening	Preliminary EIA	EIS and EMP	Environmental Authorisation	Included in EIA	Post-EIA monitoring and auditing
DRC			EIS	Favourable Environmental Opinion	EMPP and MRP	
Lesotho	Screening	Project Brief TORs	EIS and (EMMP)	EIA Licence	Included in EIA	Audit
Malawi	Screening	Project Brief OR Scoping	EIA report and EMP	EIA Certificate	Included in EIA report	Monitoring of EIA Implementation
Mozambique	Application and Screening	EPVR & Scope Definition and TORs or Pre-Assessment Or TORs	EIS and EMP  EIS and EMP or SER	Environment Licence	Included in EIA	Environmental audit and inspection
Namibia	Registration and Screening		Environmental Assessment and EMP	Letter of Authorisation	Included in Environmental Assessment	Monitoring and auditing
South Africa	Screening	BAR or Scoping	EIA and EMP	Environmental Authorisation	Included in BAR or EIA	
Swaziland	Screening	IEE and CMP or Scoping	EIA	Environmental Compliance Certificate	Included in IEE  CMP	Project Compliance Report
Tanzania	Registration and Screening	Preliminary EIA, or Scoping & TORs	EIS and EMP	EIA Certificate	Included in EIS	Environmental auditing
Zambia	Screening	Project Brief or TORs for EIS	EIS and EMP	Environmental Authorisation	Included in EIA	Post-EIA audit
Zimbabwe	Prospectus		EIA report and EMP	EIA Certificate and Permit	Included in EIA	Monitoring and auditing

**KEY :**

IEE	-	Initial Environmental Evaluation
CMP	-	Comprehensive Mitigation plan
TOR	-	Terms of Reference
BAR	-	Basic Assessment Report
EMMP	-	Environmental Management and Mitigation Plan
SER	-	Simplified Environmental Report
MRP	-	Mitigation and Rehabilitation Plan
EPVR	-	Environmental Pre-Viability Report

## 3 Requirements to Protect the Environment

### 3.1 Responsibility and Legislation

In the last decade, all the 12 mainland SADC countries have established fairly strong environmental legislation and environmental assessment processes that apply to most of the development projects carried out therein, especially infrastructure projects.

**Table 2** shows the various ministries and authorities that are responsible for the protection of the environment and for overseeing all environmental impact assessments. It also provides the name of the principal environmental management Acts governing EIAs and other regulations.

It is imperative that all consultants should carry out a detailed legal review for the countries in which they are working to familiarize with the legislation that they will need to comply with. This must be done for every project as some legislation may be amended from time to time. The given list only serves as a guide and represents the situation at the time of writing.

### 3.2 Information Required

In general, the various SADC environmental agencies require project developers to ensure that the project is environmental and socially immune. The more significant the project's possible impacts, the higher the standard of information provision and consultation that will be required before the project can go ahead. For instance if a project is deemed as extremely risky based on the country's classification of projects the client is required to ensure that the EIA is carried out by a considerable number of experts covering a wide range of disciplines (e.g. A water specialist, a zoologist, a geologist, an archaeologist, a hydro-geologist) to cover all important baseline studies and impact analyses.

**Table 2 Summary of administrative and legal structures<sup>1</sup>**

Country	Ministry Responsible for Environmental Management	Authority Responsible for EIA	Name of EIA Act	EIA Regulations
Angola	Ministry of Environment (MoE)	National Directorate for Environmental Prevention and Environmental Impact Assessment	Environment Framework Law,	Decree on Environmental Prevention and Environmental Impact Assessment, No. 51/2004 Impact Assessment of 23 July 2004
Botswana	Ministry of Environment, Wildlife and Tourism (MEWT)	Department of Environmental Affairs (DEA)	Environmental Assessment Act, No. 10 of 2010 (still to be passed into law)	In draft
DRC	Ministry of Environment, Nature Conservation and Tourism (MENCT)	Group for Environmental Studies of Congo (Groupe d'Etudes Environnementales du Congo (GEEC))	Environmental Protection Act, No. 11/009 of 9 July 2011	None
Lesotho	Ministry of Tourism, Culture and Environment (MTCE)	Department of Environment Environment Act, No. 10 of 2008 In draft	Environment Act, No. 10 of 2008	In draft
Malawi	Ministry of Natural Resources, Energy and Environment (MNREE)	Environmental Affairs, Department (EAD)	National Environmental Management Act, No. 23 of 1996 b	None, but the EIA Guidelines have been gazetted and have legal standing
Mozambique	Ministry for the Coordination of Environmental Action (MICOA)	National EIA Directorate	Environmental Law, No. 20/97 of 1 October 1997	Regulations on the Environmental Impact Assessment Process, Decree No. 45 of 2004
Namibia	Ministry of Environment and Tourism (MET)	Department of Environmental Affairs (DEA)	Environmental Management Act, No. 7 of 2007	In draft

<sup>1</sup> Adapted from Walmsley & Patel 2011

Country	Ministry Responsible for Environmental Management	Authority Responsible for EIA	Name of EIA Act	EIA Regulations
South Africa	Department of Environmental Affairs (DEA)	National DEA or provincial departments (see Chapter 12, section 12.2.2 for list)	National Environmental Management Act, No. 107 of 1998, as amended	Environmental Impact Assessment Regulations R543, R544 and R545 of June 2010
Swaziland	Ministry of Tourism and Environmental Affairs (MTEA)	Swaziland Environmental Authority (SEA)	Environmental Management Act, No. 5 of 2002	Environmental Audit, Assessment and Review Regulations of 1996, as amended in 2000
Tanzania	Vice-President's Office	National Environmental Management Council (NEMC)	Environmental Management Act, No. 20 of 2004	Environmental Impact Assessment and Audit Regulations, Government Notice No. 349 of November 2005
Zambia	Ministry of Tourism, Environment and Natural Resources (MTENR)	Zambian Environmental Management Agency (ZEMA)	Environmental Management Act, No. 12 of 2011	Environmental Protection and Pollution Control (Environmental Impact Assessment) Regulations, Statutory Instrument No. 28 of 1997
Zimbabwe	Ministry of Environment and Natural Resources Management (MENRM)	Environmental Management Agency (EMA)	Environmental Management Act, Chap 20:27, of 2002	Environmental Management (EIAs and Ecosystems Protection) Regulations, Statutory Instrument No. 7 of 2007

### 3.3 Certification of consultants

A few of the SADC countries specifically require the consultants to be registered and certified before they can be allowed to conduct EIA studies in those countries. Where this is the case the CRIDF project leader will need to ensure that the consultants that they deploy to conduct EIA studies are duly certified before they can be allowed to conduct the EIA studies. **Table 3** shows which countries require registration and certification in the region. In some rare cases, which are also indicated in **Table 3**, consultants need to obtain approval to work in the respective countries. It is however important in all cases that CRIDF exacts strict selection standards in appointing consultants to ensure that the environmental impact assessment report is easily approved for project certification. The use of poor quality consultants compromises the quality of the report and may lead to the rejection of the EIA report by the national environmental authority, further leading to delays in the implementation of the project. It is therefore in the interest of CRIDF or any project developer for that matter, to ensure that the consultants have the requisite qualification and experience for the work.

**Table 3 EIA Stages / Terminology in SADC (Adapted from Walmsley & Patel 2011)**

Country	Statutory registration and certification scheme for EIA consultants criteria	Non-statutory registration for EAI consultants based on professional with the EIA	Consultants for a given EIA to be approved by authorities before commencing	List of approved consultants held by environmental authority	EIA consultants to be independent in terms of the law
Angola	No	Yes	No	No	No
Botswana	Yes	No	No	No	No
DRC	No	No	No	No	No
Lesotho	(Uncertain)	No	Yes	Yes	No
Malawi	No	No	No	Yes	No
Mozambique	No	Yes	Yes	No	No
Namibia	(Uncertain)	No	No	Yes	No
South Africa	Yes	No	No	No	Yes
Swaziland	No	No	No	No	No
Tanzania	Yes	No	No	No	No
Zambia	No	No	Yes	No	No
Zimbabwe	No	No	No	Yes	No

*NB: At times these agencies interpret the requirements differently. It maybe prudent to seek confirmation or clearance of consultants of requirements before commencing in countries like Zimbabwe, Zambia and the DRC.*

### 3.4 Environmental Assessment Expertise

There is no standard list of experts that is needed for carrying out environmental assessments. The range of expertise required is an outcome of the scoping exercise where the subject matter areas that are deemed likely to be affected by the project become the areas of investigation in the EIA. It is generally good practice to involve a qualified environmental expert for the screening and scoping stages to ensure that all possible areas for investigation in the EIA are identified and adequately catered for in advance. For example, if CRIDF proposes to establish an irrigation project using saline borehole water there will be a need for an expert who understands salinity to fully investigate the risk to the soils and the project. Similarly, there may be need for a hydro-geologist to examine the ground water source to determine if the quality of the irrigation water can be improved if the borehole site is changed.

There are however, some common experts who routinely constitute EIA teams and these are environmental expert, vegetation/fauna expert, sociologist, water resources expert, land use expert among the principal ones.

### 3.5 Level of Detail

The level of assessment required for a project will depend on the impacts and scope of the project. Most countries have a list of categories to classify projects according to the potential risks to be suffered by the social and physical environment, and this determines the information detail and studies that will be required in order for the project to proceed. Where there is no classification provided refer to the WB IFC categorization. Where two or more countries are involved it is advised that the more stringent classification be adopted for the project in question.

### 3.6 Requirements by Different Financial Institutions

One of the main goals for CRIDF is to leverage financing for its projects. While there exists a list of potential funding institutions there is no preferred one. CRIDF requires that for any of the projects the required environmental assessment should meet the identified financiers requisites that are normally provided by the funder. The level of performance standards provided for by this guide would be sufficient for the DFID, DBSA, WB and SADC environmental requirements as long as the country legislation is also fully satisfied.

## 4 Step-by-Step Guideline

### 4.1 Important Steps in Environmental Screening

The generic steps that are followed in conducting an environmental assessment were listed in **Section 2**. This section provides a more detailed description of the activities that constitute these steps.

### 4.2 Step 1: Prospecting/or screening

Prospecting / or screening involves the initial project review or screening exercise. It is important to invoke an environmental assessment at the very beginning of the project, at the project concept stage to facilitate for the planning for downstream activities. In this step, a quick, high level assessment is made, at the project concept phase where the purpose is to identify, at this high level, all the environmental risks and opportunities associated with the project and to ensure that they are integrated into the project implementation program.

Screening may start with a desk study that basically checks the project concept and scope against legislation and whether it is exempted from a full EIA. It assigns the project to an appropriate category that determines whether further analysis is required or not, based on its scope. Below is an example of a typical environment project classification:-

- Category 1: Activities that are not likely to result in significant impact and may not require further studies
- Category 2: These are activities that are likely to cause limited significant adverse impacts upon failure to take mitigation measures. These activities may require some limited environmental studies and production of a mitigating plan
- Category 3: These activities are most likely to cause significant adverse impacts and therefore require detailed studies.

Screening is a systematic assessment and documentation of the potential environmental and socio economic impacts of potential concern. Two important questions that should be asked in order to guide the screening process are; 'what will be the effects of this development on the environment? Are the effects likely to be significant?'. Where a checklist is provided the consultant should go through a process of ticking against each known impact, determining whether it is likely to occur or not. This determines the extent of further assessment to be conducted, subject discipline, its goals and its methodology.

CRIDF procedure requires that the environmental service provider completes an "Environmental Screening form" for all projects. It is the responsibility of every CRIDF project team leader to oversee the completion of the screening form and for all the recommendations contained therein to be implemented. A copy of a screening form for use in CRIDF project is presented in **Appendix 1**. Environmental service provider should employ national procedures in order to adhere to relevant legislation, international agreements and treaties. In the CRIDF project cycle (see Section 2.2.) this constitutes part of the pre-feasibility of a project. Depending on the findings it may be decided at this stage not to proceed with the project.

**Action:-** *In some countries, there is a legal requirement to submit an application or a notice to the relevant environmental authority at this stage and to receive feedback on how to proceed. Where this is the case it is important to ensure that this is carried out as early as possible in the project cycle to minimise delays. The public agencies usually take long to respond and it is important to take these potential delays into account in the project planning.*



## 4.3 Step 2: Review of Relevant Environmental Legislation

In this activity, a thorough review of all the country's environmental legislation that has any bearing on the proposed project is carried out. The process includes an identification of the environmental laws and regulations of the country with which the project must comply.

A detailed summary of the legal review will need to be presented in the scoping and/or EIA report. At any rate, the subsequent step of scoping can only be carried out with reference to the environmental legislation of the country.

For CRIDF this stage is also part of the project pre-feasibility assessments. Combined with the screening stage and depending on other findings project proposals considered unfeasible may be terminated at this stage.

## 4.4 Step 3: Scoping

In this step, following the screening and environmental review, a scoping process is carried out where the environmental risks and opportunities identified in step 1 are examined in greater detail to determine the scope of further investigations if required. Scoping seeks to prioritise the most important issues, problems and alternatives that should be addressed. On the basis of the scope determined, a proper budget of resources needed for the EIA is prepared to ensure that the activities that need to be carried out for these investigations are adequately resourced. Poor scoping can lead to delays in the project when at a later stage it is discovered that some investigations that should have been carried out were not identified and carried out.

Scoping should include a review of capacity issues concerning prevention and mitigation of impacts for individuals and organizations as well as an assessment of the enabling environment (e.g. legislation, incentives and partnerships). CRIDF can use this scoping to identify possible modifications to the project design and is essential for focusing the available resources on the relevant issues. Scoping may, where deemed necessary, include stakeholder and public consultations. In addition, where possible, the consultant or CRIDF project lead should arrange an informal meeting with the environmental agency to inform them of the project and to solicit any concerns and other pertinent issues that they may have at this stage with regards to the project. Involving the environmental agency early in the project cycle can minimise delays in ultimate approval of the EIA report.

In summary, scoping consists of the following steps:

- Overview information gathering (Site visit, secondary data review and consultations)
- Defining the scope of the project
- Identifying the 5 Valued Ecosystem Components (VECs)
  - Legal requirements
  - Public visibility and concern
  - Economic or social importance
  - Protected, rare, and endangered species
  - Keystone species, important ecological/trophic roles
- Defining the scope of the Assessment to be conducted
- Verifying the risks and documenting the scoping work.

In some cases the scoping report should be accompanied by the draft terms of reference for a full-fledged EIA. In some countries, the environmental agency determines the scope of the terms of reference for the EIA while other country agencies rely on the terms of reference supplied by the project developer in the scoping document or prospectus as shown in table 3. In the latter the agency's role is merely to approve the terms of reference.

This is the first process in the feasibility phase for CRIDF projects.

#### 4.4.1 Public Consultation

Public consultation is a key regulatory tool employed to improve transparency and efficiency in developmental interventions. It involves actively seeking the opinions from the communities and the information gathered is important for informing decision-making processes. The basic standard is that consultations are meaningful. CRIDF requires that that “meaningful consultations” standards are used during all public engagements. To meet the meaningful consultation standards a number of conditions listed below including the communication methods that need to be satisfied.

**a) Use a communication language that is easy for the community members to understand.**

This will allow communities and interested stakeholders to express their views on the measures that developers propose to address to mitigate any negative impacts.

**b) Provide the affected communities with access to relevant information on the CRIDF project**

This information should include:

- The purpose, nature and scale of the project;
- The timeline for the project, including the date construction is scheduled to start and how long the project activities will go on;
- How the communities will be affected, including any risks to and potential impacts on the community and what can be done to minimize those risks and impacts;
- Who is involved in developing the project;
- The process for engaging communities and stakeholders;
- The process for the community to file grievances about the project planning and project impacts.

**c) Document the consultation process in detail**

Documentation of the consultation process is to include the people present, date and the minutes of the discussion. It is good practice to have a signed register of the people who are consulted. In some cases the minutes have to be presented as part of the EIA reports to the environmental management authority/agency. Note that high-risk projects may require more than one consultation and meetings.

**d) Village/community venues**

Conduct consultation meetings at the normal village community venues or in a place that is easily accessible to all affected people. Otherwise arrange for transport to the meeting venue if it is too far for people to walk to.

Meaningful consultation should focus on people and communities directly affected by the project. Ensure that consultation includes disadvantaged and vulnerable groups, such as women, children, the elderly, ethnic minorities and displaced persons. The consultation process must be free from outside manipulation, interference, coercion or intimidation.

**Action:-** As was the case with step 1, some countries require the project promoter to submit the project scoping for approval to the relevant national environmental agency. Comments made with regard to this process in step 1 with regard to delays also apply.

## 4.5 Step 4: Conduct Environmental Impact Assessment (EIA)

This stage is the heart of the EIA studies also referred to as the Environmental and Social Impact Assessment (ESIA) and typically takes the longest amount of time and consumes the greatest amount of resources. It cannot

be overemphasized, therefore, that poor scoping can lead to serious problems in the conduction of the EIA and compromises the quality of the EIA report.

An EIA typically begins with baseline studies of the biophysical and social environment, including a public consultation to solicit the views of the affected persons. In some countries the environmental agencies are strict with regards to the conduction of public consultations, insisting on submission of lists of identification details of all persons who attended the meetings or answered questionnaires (see Public consultation above). The IFC standards and some country agencies require that the consultants post advertisements of public consultation meetings in the public media (radio and/or newspapers).

#### 4.5.1 Baseline information

Upon the approval of TORs and scoping documents by authorizing agency, CRIDF starts collecting baseline information of the proposed project area. A baseline study provides baseline information that serves as a benchmark against which change due to a development can be measured. This stage is critical as it affects the impact identification and analysis. Information is required to be collected on physical, biological, socio-economic and cultural environment. In most of the cases, one time collection of the baseline information is sufficient, however a comprehensive EIA may require collecting baseline information of the project area over a longer period.

Typical information needed to be studied in detail would be:

- Geology: A full assessment of the geology of the project site. Necessary for construction activities
- Soil and soil erosion: Soil types on and around the project sites should be studied and documented. Soil information is necessary for projects that are supported by soil structures such as roads and irrigation projects. Projects that will affect soil types due to contamination, leaching and preservation of topsoil. Vulnerability of soil type to proposed project.
- Vegetation: an inventory of existing plants on the project site is necessary. Mapping of vegetation zones is required. The consultant should identify endangered and threatened species as well as ethno-botanical plants. How much do the people and animals depend on the vegetation that will be taken out by the project?
- Terrestrial and Aquatic Fauna: An inventory of animal and bird species found in the project site and surroundings. List of those that are rare, endangered or protected. Will the activities alter the habitat or foraging of the species – pathways to water sources?
- Land Use Patterns: Determine the land use patterns in the area and level of usage. Are the uses seasonal or throughout the year. Is there reserved land? How is land use controlled? Determine what land will be affected or altered by the project- approximate percentage of land area. What are the possibilities of change to the land use and is there availability of replacement land if project takes up part of the land?
- Water resources: study the water quality and quantity. The flow regime, existing and planned abstraction levels and river/stream health estimates. How much water will be used by the project and how much remains in the system? Is the project going to discharge wastewater and what quality of effluents.
- Climate change impacts: How vulnerable is the area to climate change? What are the predictions in the next 5, 10 to 50 years? How are the people coping? Is there an existing climate change strategy for the area? Current evidence of climate change impacts?
- Archaeology and cultural heritage studies: Is the project in a cultural heritage site? Are there any archaeological artefacts. Is the project going to be sited in a new virgin area? Link with land-use.

#### 4.5.2 Impact Identification and analysis

Following information gathering through the baseline studies and consultations the next step of the assessments involves “**Impact assessment**”. This is a detailed analysis of the information derived from the baseline studies to determine/predict all the potential environmental and social impacts. The impacts are also classified according to duration (short, medium, long term or permanent); and severity.

A checklist of these impacts should be assessed against stakeholder concerns, literature and baseline findings. Each impact should be categorized as positive if it produces a beneficial value and negative if it results in loss of benefits or causes any other harm. Distinction should be made between impacts that relate to the preparatory/construction phase and those that relate to the post preparatory/construction phases of the project. Further to that the impacts should be classified as either direct or indirect. For each potential impact, the consultant should determine the impact level of significance, consequence of the impact (who it will affect and how) the probability of reversing the impact, the probability of avoiding the impact and mitigation strategies where possible. Cumulative impacts should be addressed as best as possible, and how they contribute to the overall cumulative effect. An indication of whether the environment of any area beyond the limits of the national jurisdiction is likely to be affected and the mitigation measures to be undertaken should be indicated.

An example of a matrix for scoring significance is shown in the **Table 4**.

**Table 4 Impact scoring Matrix**

Variable / Ratings	1	2	3	4	5
Duration	Short term Limited to construction phase of the project	Medium term Extend to post-construction but limited to rehabilitation period of the project and within the contractor's liability period	Long term Last for the duration of the project.	Permanent Lasts for beyond the project	
Scale (Area extent)	Site/immediate surroundings	Catchment Extends to catchment level	Regional Extends to regional level	National Extends to national level	International Extends to international level
Severity/Intensity	Low	Moderate	High	Very High	
Certainty/probability	Possible / Improbable - Low possibility due to design or historic experience	Probable - Distinct possible to occur	Highly probable - Most likely to occur	Definite - Will occur regardless of prevention	
Affected Parties	No influence	Neutral	Indifferent	Negative influence	
Legal conformance	Yes	No			
Impact Significance	Low ≤7	Medium 7-11	High 12-18		

## 4.6 Step 5: Mitigation Measures and Environmental Management Plan (EMP)

Mitigation involves taking measures to reduce or remove negative environmental impacts. The environmental consultant at this stage should propose possible mitigation measures for all the negative impacts that will be identified. The measures should be as practical as possible and if possible, based on tried and tested interventions carried out elsewhere. This involves an analysis of the impacts identified in step 3 to determine possible mitigation measures for all negative impacts identified; and to enhance or highlight all positive impacts to ensure maximum benefits. The EMP outlines the activities that will be carried out to mitigate against negative impacts and to take advantage of the positive impacts. The EMP must be fully integrated into the project phases and activities with clearly indicated timelines. This plan is best prepared by as many qualified technical and environmental experts in the team as possible to ensure that the recommended activities are (a) technically feasible, (b) practical, and (c) affordable. Tabulating the entire plan makes it easy to use during and after project implementation.

Compensation and Resettlement Plans, if required are part of EMP process. However, it is not expected that the CRIDF project by virtue of infrastructure size and their nature would displace people, either socially or economically.

With regards to CRIDF projects it is a requirement that the environmental consultants procured for an EIA process produce an Environmental Management Plan as part of the ESI report. The EMP is also part of the documents that are handed over to the main financiers if CRIDF is not implementing the project.

If CRIDF is implementing the project, the project lead will draw an action plan for supervision and monitoring with clear reporting outputs. At any point the proposed mitigations can be revised if they are deemed not to meet the expected corrective results. CRIDF will endeavour to ensure that the project owner has capacity and institutional support to continue with long term monitoring of project, before any handover is done. Where necessary training maybe recommended to ensure that the owner appreciates the need for reviewing and monitoring progress and is capable of undertaking the required measures.

## 4.7 Step 6: Report writing

In this step, all the data and information collected and analysed is compiled into a comprehensive EIA report. It is important to point out here that the report needs to be easily readable as it is a public document that is referred to not only by technical persons but by other informed members of the public as well. In some countries the EIA agency will provide its own guidelines and a typical table of contents for the EIA reports. The onus is on the consultant to follow that requirement.

### 4.7.1 Contents of the EIA report

If the country legislation do not specify the contents of the EIA Report, then the content as given in **Table 5** will be provided by the consultants.

**Table 5 An example of Contents of an EIA report**

Topic	Description
Executive Summary	<ul style="list-style-type: none"> <li>• Project description summary</li> <li>• Summary of baseline findings and impacts</li> <li>• Summary of mitigation measures</li> </ul>
Introduction Aims and objectives	<ul style="list-style-type: none"> <li>• Scoping Report and conditions of acceptance</li> <li>• Purpose of the EIA</li> <li>• What is CRIDF and expertise of the consultants who carried the study</li> </ul>
Full description of proposal and alternatives	<ul style="list-style-type: none"> <li>• Describe the proposed activity.</li> <li>• Describe the specific project components (design)</li> <li>• Locations of activity</li> <li>• Need or objective of projects and timing</li> <li>• Alternatives (site, design, layout)</li> </ul>
Site Description (the receiving environment)	<ul style="list-style-type: none"> <li>• Physical environment (geology, hydrology (surface &amp; ground water), topology)</li> <li>• Biological environment (vegetation, fauna)</li> <li>• Socio-economic environment</li> </ul>
Legal Framework, Legislation and policies and relevance to project, Legal expectations from the EIA	<ul style="list-style-type: none"> <li>• Describe all relevant <b>local legislation and customs</b> that apply to project</li> <li>• Identify <b>gaps</b> between local laws and International standards – use World Bank Group IFC SP1 and description of the chosen standards</li> <li>• Define and identify pre-requisites relevant for activity (e.g. authorizations, certificates and permits)</li> </ul>
Public participation Process	<ul style="list-style-type: none"> <li>• Describe methods used and meetings held.</li> <li>• Describe summary of meetings and registers</li> <li>• Summary of comments register if any</li> <li>• Public Review of draft EIA.</li> </ul>

Topic	Description
Baseline information (Specialist studies)	<ul style="list-style-type: none"> <li>Describe the Social environment.</li> <li>Describe the Biophysical environment (Soils, fauna, flora, geology, hydrology, climate change) <i>NB some studies will be more relevant than others</i></li> <li>Cultural environment</li> <li>Archaeology (May not be an issue in some sites)</li> </ul>
Impact identification and analysis	<ul style="list-style-type: none"> <li>Environmental issues and associated impacts</li> <li>Describe the potential impacts - include the ecology, Physical environment and socio-economic impacts).</li> <li>Describe the method used in determining impact significance                             <ul style="list-style-type: none"> <li>nature of impact</li> <li>extent</li> <li>duration</li> <li>severity or intensity</li> <li>probability</li> </ul> </li> <li>Other aspects e.g. If there is people who will be displaced</li> </ul>
Impact mitigation and environment management plan	<ul style="list-style-type: none"> <li>Mitigation of impacts</li> <li>List impacts and practical ways for mitigating them</li> <li>Provide a management plan for the monitoring of impacts and managing them.</li> <li>Describe project indicators, responsible institutions</li> <li>Define <b>external monitoring</b> methodology, key indicators, frequency, feedback loops</li> <li>Define a detailed <b>schedule</b> of activities for implementation</li> <li>Describe process of involving affected people <b>monitoring where possible</b></li> </ul>
Environmental statement	<ul style="list-style-type: none"> <li>Opinion on authorization of activity</li> <li>Environmental impact statement</li> </ul>
Annexes or Appendices	<ul style="list-style-type: none"> <li>Copy of Terms of Reference</li> <li>Copies of census and survey instruments, interview formats and any other research tools</li> <li>Information on all public consultation, including announcements and schedules of public meetings, meeting minutes and lists of attendees</li> <li>Examples of formats to be used in monitoring and reporting</li> <li>Specialist study reports (usually required for highly risky projects)</li> </ul>

## 4.8 Step 6: Report Submission

When complete, the EIA report needs to be submitted to the national environmental authority / agency for evaluation ahead of the granting of an environmental management certificate or permit, depending on the terminology of the respective country.

### 4.8.1 Submission of EIA reports and Reviews

Once the EIA is complete, the EIA needs to be submitted to the competent authority, usually the national environmental management agency. The agency will review the report and determine if the contents therein sufficiently provide for the protection of the environment and the compliance of the project with the legislation.

After review of the report, the agency will return a verdict, which can be any of the following:

- An acceptance of the report and issuance of an environmental management certificate allowing the project to proceed. The environmental management certificate is granted when the agency is satisfied with the contents of the report and the proposed EMP.
- An acceptance of the report and issuance of a certificate, but with some listed special conditions that the developer must abide by;
- A rejection of the report and a request for the environmental consultant to carry out some specified additional studies; or in rare situations
- The EIA report is rejected by the agency, with the requirement that it be redone in its entirety.

A request for the consultant to carry out further work or the rejection of the report in its entirety, can lead to serious delays in the project delivery and all efforts must be made to avoid these outcomes. Besides leading to delays in the project delivery, they also cause huge increases in costs as the additional work is unbudgeted.

In some cases the authorities will ask for a number of hard copies of the report, the CVs or certification of the consultants who carried out the study, as well as large scale maps.

An environmental impact assessment charge may also be levied by the environmental authorities. It is important that CRIDF budgets for such costs during the planning stage.

The length of time allowed for the review process is usually stated in the environmental management regulations and a verdict must be returned by a certain time. It is also important to check the length of time allowed for this assessment according to the laws of the country and to factor this delay into the project schedule.

It's the responsibility of CRIDF and the consultant to ensure that a receipt is obtained upon submission of the report.

The environmental management certificates issued by the various agencies have a shelf life and expire after a certain period. It is important to ensure that the expiry date of the certificate is noted to ensure that implementation is carried out within the validity period. It is also important to understand the conditions that apply to the extension of these certificates.

## 4.9 Other Possible Tasks

### 4.9.1 Producing an Environmental Impact Statement

In some countries it is required to produce an environmental impact statement. This is a non-technical summary of information contained in an ESIA report, presented in a concise format and for non-technical readers especially decision makers. The environmental impact statement can be part of the EIA report or in some cases it is requested as a separate document. It basically is intended to inform the public about the nature and likely consequences of a development in time to comment or participate in the final design.

CRIDF consultants should only produce an impact statement if it is requested by the EIA agency.

### 4.9.2 Monitoring

Monitoring is an integral part of EIA and should be clearly specified in the EMP. Monitoring usually commences during construction and continues throughout the project life. Responsibility for monitoring during the project construction lies with the developer and the EIA agency. During operations of the projects the owners of the project have to comply with the management plan and periodic environment audits may be implemented by the agency in order to ensure that the EMP is being followed.

## 4.10 Cumulative impact assessments

Most of the environmental challenges we face today occur due to multiple and perhaps varied past and existing activities whose impacts have accumulated over time and in related systems. These activities include the increase of greenhouse gases and the impacts on downstream river ecosystems. To ensure that CRIDF projects are environmental and socially immune it is important that the projects are checked for cumulative impacts.

### 4.10.1 What is a CIA?

A cumulative environmental impact assessment (CEIA or CIA) enlarges the analysis from just an EIA to consider the impacts of other projects or facilities or uses on any assets that are within the proposed projects zone of influence – that is cumulative in the spatial sense. Cumulative impact assessments also take into account known or reasonably foreseen developments – cumulative in temporal sense.

Example of such impacts include :-

- incremental contribution of gaseous emissions to an air zone;
- reduction of water flows in a waterbasin due to multiple withdrawals;
- increases in sediment loads to a waterbasin;
- interference with migratory routes or wildlife movement;
- or more traffic congestion and accidents due to increases in vehicular traffic on community roadways: and,
- depletion of resources due to increased population influx.

### 4.10.2 When is it necessary to carry out a CIA

CIA's are necessary when for a planned project the social consequences are the most ecologically devastating environmental effects and subsequent social consequences may result not from the direct effects of a particular action, project, or activity but from the combination of existing stresses and the individually minor effects of multiple actions over time. CIAs may also be carried out when there is need to identify and manage the risks of incremental impacts on areas or resources used or directly affected by a given development from other existing, planned, or reasonably defined developments.

When CRIDF implements projects to a component on an ecosystem where there already exists other projects or where future projects are planned e.g. water abstraction projects, dams on a river it is prudent that a cumulative impact assessment is done. For practical reasons, the identification and management of cumulative impacts are limited to those effects generally recognized as important on the basis of scientific concerns and/or concerns of affected communities.

### 4.10.3 CIA Procedure

The methods and tools are similar to those of EIA practice. The primary difference is related to the need to in cooperate other actions and their contribution to cumulative effects on specific vulnerable environmental components. Examples of modifications include a) adding "other actions' questions to questionnaire checklist focused on identifying direct and indirect of proposed actions and b) modifying the impact scoring matrix (see **Table 4**) by adding columns for past, present and future activities' impacts.



# 5 Strategic Environmental Assessment

## 5.1 Introduction

Environmental Impact Assessment methods and techniques often have limited value in ensuring that policy and program plans are socially, economically or environmentally beneficial. By their nature they have no influence at the strategic level interventions. In such a situation there is therefore a need to implement a different environmental assessment approach. Hence the Strategic Environmental Assessment SEA.

## 5.2 Defining an SEA

A SEA is an approach that involves a range of ‘analytical and participatory approaches that integrate environmental considerations into policies, plans and programmes and evaluates their inter-linkages with economic and social considerations’ (IAIA SEA Principles). It is applicable to all stages of decision-making that is in evaluating existing policies and plans, or developing new ones. It complements the project impact assessment tools and goes beyond by looking at related programmes. Overall it should contribute to development effectiveness.

Therefore a **SEA** is a systematic process for evaluating the environmental consequences of proposed policy, plan or programme initiatives in order to ensure they are fully included and appropriately addressed at the earliest appropriate stage of decision making on par with economic and social considerations (Sadler and Verheem, 1996)

## 5.3 CRIDF Programme SEA Requirements

Generally the work that CRIDF does is at project level and rarely requires that an SEA be carried out. However, certain initiatives may requires either scaling up or development of a group / programme of projects, which will then require an SEA to be undertaken.

### 5.3.1 SEA Procedure

SEAs are relatively new and the requirements and procedures are still evolving. Due to the variation in approaches and programme purposes, there is no single acceptable method on how SEA’s should be conducted. It is recommended that the assessment tools used should be developed to be specific to the programme being considered. However, some guiding principles have since been proposed by the IAIA as good standards and these have a basis on the EU SEA directive as well as the UNECE (**Table 6**).

**Table 6 SEA Good Performance Criteria (Adapted from the IAIA)**

Criteria	Description
Is integrated	Is tiered to relevant sectors, policies and transboundary regions. It should address the interrelationships of the biophysical, social and economic aspects.
Is sustainability-led	Facilitates identification of development options and alternative proposals that are more sustainable.
Is focused	Concentrates on key issues yet Provides sufficient, reliable and usable information for development planning and decision-making.
Is accountable	Is carried out professionally, with rigor, fairness, impartiality and balance. Subject to checks and verifications. Above all contributes to decision-making
Is participative	Informs and involves interested and affected public and government bodies throughout the decision-making process. And has accessible information
Is iterative	Ensures availability of the assessment results early enough to influence the decision making process and inspire future planning. Provides sufficient information on the actual impacts of implementing a strategic decision, to judge whether this decision should be amended

### 5.3.2 Legal requirements

Internationally the SEA model and practice that has developed globally is enshrined in the European SEA Directive and the United Nations Economic Commission for Europe UNECE SEA Protocol of 2003. Within the SADC region legal provisions for SEA are normally covered within the SEIA regulations and laws, as statutory instruments, cabinet and ministerial decisions, circulars or advice notes. The detail and specificity differs, in some countries it is a mere recommendation while in others it is an absolute legal requirement for certain plans and programmes (**Table 7**). In general the provision is not supported by detailed regulations stating how the SEA should be undertaken.

**Table 7 Legislation that has some form of SEA provision within the SADC**

Country	Legislation
Angola	No known information
Botswana	The EIA Act (no 6 of 2005) also requires that an SEA accompanies development of policies and programmes (Section 6(1) (b)). The process of undertaking SEAs as well as their content is elaborated in some cases through Regulations for the Act.
DRC	No Known Information
Lesotho	The Environmental Act (2008) requires an SEA to be undertaken for any governmental bill, regulation, policy, programme or plan that could have a significant effect on the environment. No specifics or content requirements are given.
Malawi	Although not specifically mentioning SEAs, the Environmental Management Act (no 23 of 1996) requires environmental assessment of “major policy reforms”. Together with the National Environmental Policies of 2004, the understanding is that authorities or anyone undertaking a major development work is mandated to undertake a strategic assessment.
Mozambique	The environmental legislation Law and Decrees, list activities that require environmental assessments and some of these are programme level activities
Namibia	In the Environmental Management Act (No 7 of 2007), government agencies are required to carry out an environmental assessment of proposed policy, plan or programmes to determine their effects on the environment. The procedure for undertaking the SEAs is outlined in “draft” regulations.
South Africa	The National Environmental Management Act (NEMA No 107 of 1998) makes provisions for the procedures for assessment of impact of policies, plans and programmes. Different sectors have developed their own SEA frameworks.
Swaziland	Section 31 of the Environmental Management Act (no 5 of 2002) makes provision for the strategic environmental assessment of parliamentary bills, regulations, policies, plans and programmes, which may have a significant negative impact on the environment, or on the sustainable management of resources.
Tanzania	SEA is required in terms of part VI of the Environmental Management Act of 2004. The Act provides a list of the type of information that must be included in an SEA.
Zambia	An SEA is not formally enforced although the Environmental Protection and Pollution Control Act (1990) enables the Environmental Council of Zambia to identify plans and policies of which an environmental assessment is required.
Zimbabwe	No formal requirements.

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- Walmsley, B & Patel, S, 2011. Handbook on environmental assessment legislation in the SADC region. 3rd edition. Pretoria: Development Bank of Southern Africa (DBSA) in collaboration with the Southern African Institute for Environmental Assessment (SAIEA).
- IAIA Principles of EIA best Practices [http://www.iaia.org/uploads/pdf/principlesEA\\_1.pdf](http://www.iaia.org/uploads/pdf/principlesEA_1.pdf)
- IAIA Public Participation International Best Practices 2006. <http://www.iaia.org/uploads/pdf/SP4.pdf>
- Guidelines and principles of Impact assessments
  - Source of Information: The SEA handbook
  - [www.sadc.org](http://www.sadc.org)
  - SEA in Southern Africa. Michelle Audouin, Paul Lochner and Peter Tarr.
  - <http://www.iaia.org/uploads/pdf/SP4.pdf>
  - [https://www.ifc.org/wps/wcm/connect/3aebf50041c11f8383ba8700caa2aa08/IFC\\_GoodPracticeHandbook\\_CumulativeImpactAssessment.pdf?MOD=AJPERES](https://www.ifc.org/wps/wcm/connect/3aebf50041c11f8383ba8700caa2aa08/IFC_GoodPracticeHandbook_CumulativeImpactAssessment.pdf?MOD=AJPERES)

# Appendix 1 - Environmental Screening Template

## CRIDF ENVIRONMENTAL SCREENING FORM (ESF)

### A. PROJECT INFORMATION

Project type:

Location:

Project Title:

### B. PROJECT DESCRIPTION/LOCATION (Based on reconnaissance visit)

### C: Project Impact Checklist

	Identify potential effects to the following physical, natural, or cultural resources	No Effect	Negligible Effects	Minor Effects	Exceeds Minor Effects	Data Needed to Determine
1	Geological resources – soils, bedrock, streambeds, etc.					
2	From geohazards					
3	Air quality					
4	Soundscapes					
5	Water quality or quantity					
6	Streamflow characteristics					
7	Marine or estuarine resources					
8	Floodplains or wetlands					
9	Land use, including occupancy, income, values, ownership, type of use					
10	Rare or unusual vegetation – old growth timber, riparian, alpine					
11	Species or special concern (plant or animal; state or federal listed or proposed for listing) or their habitat					

	Identify potential effects to the following physical, natural, or cultural resources	No Effect	Negligible Effects	Minor Effects	Exceeds Minor Effects	Data Needed to Determine
12	Unique ecosystems, biosphere reserves, World Heritage Sites					
13	Unique or important wildlife or wildlife habitat					
14	Unique, essential or important fish or fish habitat					
15	Introduce or promote non-native species (plant or animal)					
16	Recreation resources, including supply, demand, visitation, activities, etc.					
17	Visitor experience, aesthetic resources					
18	Archaeological resources					
19	Prehistoric/historic structures					
20	Cultural landscapes					
21	Ethnographic resources					
22	Museum collections (objects, specimens, and archival and manuscript collections)					
23	Socioeconomics, including employment, occupation, income changes, tax base, infrastructure, concessions					
24	Minority and low income populations, ethnography, size, migration patterns, etc.					
25	Energy resources					
26	Other agency or tribal use plans or policies					
27	Resource, including energy, conservation potential, sustainability					
28	Urban quality, gateway communities, etc.					
29	Long-term management of resources or land/resource productivity					
30	Other important environmental resources					

	Identify potential effects to the following physical, natural, or cultural resources	No Effect	Negligible Effects	Minor Effects	Exceeds Minor Effects	Data Needed to Determine
	(e.g., geothermal, paleontological resources)?					

Comments/recommendations of consultant.

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**SUPERVISORY SIGNATORY**

*Based on the environmental impact information contained in this environmental screening form, environmental documentation for the subject project is complete.*

Recommended: Specialist	Telephone Number	Date

Approved: Supervisor	Telephone Number	Date

## Appendix 2 – Guideline Scope of Works for CRIDF EIA's.

The **Scope of Works (SoW)** for an EIAs system provides a complete guide for carrying out studies. In some countries it is a legal document and has to be approved by the authorizing agency. The contents of terms of reference vary according to project type, scope and site. To prepare for comprehensive SOW's the CRIDF should have an idea of the project they will implement, project costs, a timeline, locality of projects and population profile. The team lead should at least have completed a reconnaissance visit of the project site.

Following is a template of terms of reference for an EIA under the CRIDF program to assist CRIDF project management staff in supervising EIA and ensuring that EIA are sufficiently scoped and that consultants are sufficiently briefed to produce EIA reports that will be approved for certification as quickly as possible. The terms of reference will be issued to invited consultants to assist them in preparing technical and financial proposal for carrying out the EIA work.

Specific terms of reference will need to be prepared for every assignment in line with specific project details.

### SOW Outline

Terms of Reference for the Environmental Impact Assessment of the CRIDF project to ..... in .... District, ... (country).

#### 1. Introduction

Climate Resilience Infrastructure Development Facility (CRIDF) is southern African regional project that was established to assist communities in undertaking development activities that not only mitigate the impact of climate change but also renders the communities more resilient to the impact of climate change. More detailed information with regard to CRIDF can be found on the website [www.....](http://www.....)

The XXXX Project in ... district of ... (country) is being implemented under CRIDF. In line with national and international environmental requirements, an EIA is required for this project and CRIDF is seeking the services of competent consultants to carry out these studies.

#### 2. Background to the Project

- Short summary description of the XXXX project is given with summary details of the technical features of the project, as well as a summary of the situation in the project area such as population, climate, water supply and food supply in the project area. This summary should clearly show the reason why CRIDF selected this project area for this initiative.

#### 3. Project Location

- Provide an accurate description of the location of the project site. This is very important as misunderstandings can arise in the costing of the project if the consultant carries out costing of transport and field accommodation on a misconception of the project site location. It is best to give grid coordinates and to state the distances to the nearest town and the nature of the roads to the sites. If available a location map may be provided.

#### 4. Overall Aim of the EIA

- State the overall aim of the EIA. e.g.

The aim of an environmental impact assessment (EIA) is to identify all the likely positive and negative impacts of Project XXX on the biophysical and socioeconomic environment in which it is being implemented. The deduction of likely environmental impacts should be based on a detailed study of the baseline environmental situation and a good understanding of the interventions planned through the CRIDF project. Thus, a thorough study of the baseline environmental situation will need to be carried out.

All positive environmental impacts that will be identified will need to be highlighted for use in enhancing the overall impact of the project to the area of implementation. On the other hand, all negative environmental impacts will need to be carefully examined and classified with regard to duration (short, medium, long term or permanent) and severity (minor, medium and significant severity). For each of the negative impacts, measures will need to be devised for their mitigation and /elimination, and the costs of these mitigation measures will need to be calculated so that they can be included in the project design and budget.

On the basis of the environmental impacts identified, the consultant is expected to produce an Environmental Management Plan (EMP) for the project.

Lastly, the objective of the EIA is to ensure that the project is compliant with all the current national environmental laws of .... (state country). (If the project is being funded through an international organization such as the World Bank or EU it will be important to state that this EIA also needs to be compliant with the requirements of the respective international funder)

With regard to the fulfilment of the national environmental requirements, the consultant will need to submit the EIA report to the ... (name of national environmental agency) and to organize for the payment of any assessment and certification fees. The fees must be specified in the project budget.

#### 5. The Components of the EIA

The consultant will conduct the EIA in a comprehensive manner to include the following components:

- Review of all project background documents;
- Collection and study of background information on the project area;
- A comprehensive review of all relevant environmental legislation for the country, to clearly identify all the legislation which the CRIDF project will need to be compliant with;
- Field work to the project site to collect information on the biophysical and socioeconomic environment.
- Conduction of a public consultation for the project. (for some countries this is a very critical requirement where the consultant needs to carry this process out in a widely publicized and transparent manner that is well documented)
- Identification of likely impacts of the project on the biophysical and socioeconomic environment;
- Devising mitigation measures for negative environmental impacts and costing of these mitigation measures;
- Preparation of an Environmental Management Plan (EMP) for the project;
- Preparation of a comprehensive EIA Report for submission to the relevant national environmental agency
- Submission of the EIA report to the national environmental agency and payment of the requisite assessment fees.
- Obtaining the environmental management certificate or permit for the CRIDF Project XXX

***NB: It is the responsibility of the consultant to ensure that the scope of work covered in the SOW as well as the proposal that he/she submits to CRIDF is adequate to obtain EIA certification/permit.***

#### 6. Expected Deliverables

The two main deliverables for this EIA study are:

- The comprehensive EIA report including an EMP for use by CRIDF in the management of the project;
- Any revisions to the report that are requested by the environmental agency; and
- The Environmental Management Certificate or Permit from the relevant national environmental management agency allowing CRIDF to proceed with the project under specified conditions.

#### 7. EIA Methodology

The consultant is required to submit a detailed methodology of how they propose to carry out the study to produce the requested deliverables. The methodology should separate desk studies from fieldwork and should itemize the activities that will constitute field work.

#### 8. EIS Standards to be applied



The EIA for Project XXX will need to be compliant with the national standards the ...(country). The EIA will need to be carried out to secure certification from the national environmental agency of ...(country).

## 9. Program Schedule

All the studies in the EIA will need to be completed in ....weeks from award of contract according to the following schedule:

- i. 2 Weeks from award of contract.
- ii. .... to be completed by end of ... weeks/months from award of contract
- iii. ....weeks from award of contract
- iv. ....weeks from award of contract

### Program Schedule for EIA study for CRIDF Project XXX

Activity	Time from Award of Contract
Production of Scoping Report/Prospectus	2 weeks from award of contract
Field Work	...
Identification of Impacts and deduction of mitigation measures	...
Preparation of Environmental Management Plan with costing	...
Completion of Comprehensive EIA Report	...
Submission of EIA report to relevant Environmental Management Agency	...

## 10. EIA Study Team

The consultant will need to compile a team of environmental experts to cover all the fields constituting the scope of this study, led by a team leader who should be a qualified environmental expert with proven EIA project management skills and experience. As a minimum, the team should include the following:

- Team leader and environmental consultant to supervise all the activities and to compile the EIA report;
- a sociologist to carry out the public consultation and to carry out the baseline sociology studies;
- a ... expert to carry out the...
- a... expert to carry out the ...
- a....expert to carry out the ....

The consultant must submit detailed CVs of all the consultants demonstrating their expertise in the respective field that they will cover in the study. If there is specific country requirements regarding certification of consultants these should be met.

## 11. Suggested Report Outline

The consultant is expected to produce a comprehensive report according to the outline in this guide, although the consultant is at liberty to modify this outline to suit findings made in the course of the study.

## 12. Budget

The consultant must prepare a comprehensive budget for the EIA studies comprising the following:

- i. Professional time input for all the consultants
- ii. Itemized expenses for all activities including field expenses of travel, accommodation, airfares and ground transportation.

## 13. Company Profile (Optional)

The consultant needs to provide a detailed company profile that includes a list of all relevant EIA studies carried out in the past 10 years.

## 14. Proposal Submission Deadline

The deadline for the submission of the EIA report to the national environmental agency is...