

REPUBLIC OF BURUNDI



MINISTRY OF THE ENVIRONMENT, AGRICULTURE AND LIVESTOCK  
BURUNDIAN OFFICE FOR THE PROTECTION OF THE ENVIRONMENT



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# STRATEGIC FRAMEWORK FOR ENVIRONMENTAL AND SOCIAL MANAGEMENT

Gitega

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## ACRONYMS

<b>APA</b>	Access and Benefit Sharing
<b>WB</b>	World Bank
<b>CEEAC</b>	Economic Community of Central African States
<b>CGES</b>	Environmental and Social Management Framework
<b>CMS</b>	Convention for the Protection of Migratory Species
<b>UNCCD or CLD</b>	United Nations Convention to Combat Desertification
<b>COMESA</b>	Common Market for Eastern and Southern Africa
<b>TD</b>	Tender Documents
<b>DECC</b>	Department of Environment and Climate Change
<b>EIA</b>	Environmental Impact Study
<b>ESIS</b>	Environmental and Social Impact Study
<b>MWECTP</b>	Ministry of Water, Environment, country and Town Planning
<b>NIN</b>	Environmental Impact Notice
<b>BOPE</b>	Burundian Office for the Protection of the Environment
<b>SDG</b>	Sustainable Development Goals
<b>ESIMP</b>	Environmental and Social Impact Management Plan
<b>NFP</b>	National Forest Policy
<b>UNDP</b>	United Nations Development Program
<b>POP</b>	Persistent Organic Pollutants
<b>ESMS</b>	Environmental and Social Management Strategy
<b>NESB</b>	National Environmental Strategy of Burundi
<b>ATPECA</b>	Agricultural Transformation Project in East and Central Africa
<b>ToR</b>	Terms of Reference
<b>UNFCCC</b>	United Nations Framework Convention on Climate Change

## **SOME KEY CONCEPTS**

**Biological diversity:** Variability of living organisms from all sources including, for instance, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part; this includes diversity within species and between species as well as that of ecosystems.

**Climate change or climate change:** it corresponds to a lasting modification of the statistical parameters of the global climate of the Earth or of its various regional climates.

**Ecosystem:** dynamic complex formed by communities of plants, animals and micro-organisms and their non-living environment which, through their interaction, form a functional unit.

**Mitigation of climate change:** designates actions against global warming of human origin aimed at mitigating its magnitude by reducing greenhouse gas emissions or by sequestering carbon dioxide from the atmosphere.

**Environment:** it is the whole of the elements of nature which includes air, water, earth including soils and minerals, energy and living organisms other than humans; the interaction between the elements of nature and between these elements and humans; physical, aesthetic and cultural qualities or conditions that affect the health or well-being of populations.

**Environmental and social impact assessment (ESIA):** this is a process which, at the start of planning, determines and assesses the risks of a project's environmental impact. In this sense, the ESIA represents a proactive and preventive approach to management and environmental protection.

**Environmental assessment:** it is the assessment of a place, a strategy, a plan, program or scheme with regard to its consequences on the environment. It therefore includes an assessment of the composition and conditions of the biophysical environment (the abiotic part of the environment) and of the human and non-human environment (the living).

**Environmental monitoring:** corresponds to close monitoring of the development of project or program activities and their impact on the environment. Its objectives are: to measure the real impacts of an activity or a project; compare to expected impacts; assess the effectiveness of the mitigation and improvement measures selected.

**Natural resource:** it is any living or non-living element naturally present in the environment having an actual or potential use or value for humanity, in particular: air, earth, water, soils, minerals, energy, genetic, biochemical resources, organisms or part of these organisms, populations and other biotic elements of an ecosystem.

**Environmental impact:** refers to all of the qualitative, quantitative and functional changes in the environment caused by a project, throughout its life cycle.

**Mitigation measures:** a mitigation measure makes it possible to prevent or contain at a minimal level of the negative environmental impacts induced by a project. It thus prevents any dangerous disturbance of the environment.

**Pollution:** the introduction by humans, directly or indirectly, of substances or energy into the lake environment, which causes or is likely to cause risks to human health, a danger for living organisms and ecosystems, damage to facilities or interference in the legitimate uses of the lake, including fishing and navigation.

**Mitigation:** Mitigation is specific to the prevention of major natural risks. The mitigation measure aims, for a risk that cannot be prevented, to take precautionary measures to mitigate the damage (environmental, social, economic, health, epidemiological, etc.) or to make it more bearable by the public. It is action that leads to reducing the intensity of hazards and the vulnerability of issues

## **INTRODUCTION**

The Burundian Office for the Protection of the Environment (BOPE) is a public structure in charge of environmental control and safeguarding. It is responsible for the effective protection of the environment, the preservation of biological diversity, the fight against desertification and climate change. Its prerogatives also include the implementation of projects and programs of community interest targeting different sectors (hydraulics, environment, agriculture, livestock, etc.).

For compliance with national laws and regulations, international conventions and sub-regional and regional agreements, each BOPE project must have a sustainable development approach, with respect for environmental and social standards. Thus, each project or program must develop an Environmental and Social Management Framework (ESMF).

This document presents the Strategic Framework for Environmental and Social Management of the Office. It is designed to serve as a guide to make available to BOPE projects and programs, the tools to properly design their Environmental and Social Management Frameworks and properly develop their Environmental and Social Impact Management Plan (ESIMP).

Through a series of clearly defined procedures and processes, it provides the tools necessary for the implementation of projects and programs with a view to sustainable development.

It is structured around two main parts. The first part presents the context and generalities of an environmental responsibility approach, evoking the need for the Office to have a Strategic Environmental and Social Management Framework, but also the scope of the framework. The second part presents the operationalization of the environmental and social management policy around five major points:

- The reference framework at international, sub-regional and national levels;
- The institutional framework;
- Environmental and social management in the project cycle in practice;
- Management of environmental and social risks in each stage of the project cycle;
- The development of the Environmental and Social Impact Management Plan.

The document is designed to have a didactic character allowing it to be easily understood and used by the various local actors for which it is intended.



## **I BACKGROUND AND GENERALITIES OF AN APPROACH TO ENVIRONMENTAL AND SOCIAL RESPONSIBILITY**

### **I.1 Why an Environmental and Social Management Framework for the BOPE?**

The Burundian Office for the Protection of the Environment (BOPE), according to the decree which creates it, has the following main missions:

- Ensure compliance with the Water Code, the Forest Code, the Environment Code and other texts related to the protection of the environment;
- Set up and monitor mechanisms for international trade and exchange of flora and fauna species;
- Enforce environmental standards and propose all measures to safeguard and protect nature;
- Monitor and evaluate development programs to ensure compliance with environmental standards in the planning and execution of all development projects, which may have a negative impact on the environment;
- Ensure the implementation of obligations arising from international environmental conventions and agreements to which Burundi is a member state;
- Identify and propose new Areas to protect and other areas rich in biodiversity requiring special protection measures;
- Undertake and encourage research and support measures for the maintenance of biological diversity;
- Establish quality standards for forest species;
- Put in place mechanisms to mitigate and adapt to climate change;
- Prepare technical files for the National Environment Commission.

**To ensure the proper conduct of its missions, the Office has the following prerogatives, which are given to it by the abovementioned Decree:**

- Ask anybody concerned to give a report on the state of the environment;
- Visit without notice any construction project site, industrial and commercial establishment as part of inspections of activities contributing to environmental degradation;
- Collaborate with other bodies and organizations from inside and outside the country;
- Receive aid, subsidies or donations;
- Award prizes and possible subsidies in order to facilitate research and capacity building in the area of integrated environmental protection management;
- To make pay the fines in accordance with the law to any the legislation breaker in force as regards environment;

- Bring to justice any offender in environmental matters.

These missions and prerogatives thus make the structure, an institution of control, watch and alert on the actions, activities, interventions and threats that can weigh on the environmental framework of Burundi. More than ever, they find legitimacy in the face of the generalized acknowledgment of the negative affect, by various human interventions, of the essential element of life that is the environment.

In addition to these environmental protection prerogatives, the BOPE is required to implement socio-community development projects and programs targeting various sectors of activity (agriculture, livestock, hydraulics, etc.). These programs, which the Office can implement, are themselves capable of causing negative effects and impacts on the environment and the living environment in general. These potential impacts or environmental and social risks can be of various orders: noise pollution, pollution of water and living environment, production of solid and liquid waste, allocation of the ground water by physical works, cutting trees, displacement of populations, poorly managed wastewater production, air pollution, excessive exploitation of natural resources, the appearance of conflicts within community groups, etc.

The Office, as an institution working for socio-community development and protection of the environment, is obliged to have a systematic eco-responsible approach with a view to sustainable development. With the aim of mastering, managing and anticipating possible negative environmental and social impacts, the Office is giving itself the means to ensure effective strategic, but also operational, management of an environmental and social management strategy, in order to have a sustainable development approach.

In addition, the Office works with institutions, technical and financial partners and donors, who technically and / or financially support its projects and programs and who are very attentive to safeguarding the environment.

Thus, to continue to better work for sustainable development in Burundi, the Office endeavors, more than ever, to assume its vocation of protecting the environment by ensuring its missions and prerogatives which are protection, environmental education, environmental monitoring, anticipation of environmental and social risks, management of environmental risks and disasters, adaptation and resilience to climate change, etc. All these reasons place the BOPE under the obligation to systematize its sustainable development approach through the adoption of a formal, structured and shared Environmental and Social Management

Framework (ESMF) having as its reference framework to the legislative and regulatory texts in force in Burundi and relating to the environment and development, international references (conventions and international agreements) and regional and sub-regional references, but also to other sectoral policy documents.

## **I.2 Objectives of the BOPE Environmental and Social Management Framework**

The Office's ESMF includes mechanisms described in specific environmental and social assessment procedures and processes applied to projects and programs. It involves all the actors mobilized in the conduct of projects and programs, but also the institutions and structures in Burundi working for the protection of the environment and sustainable development.

The great concern of ESMF is to promote and facilitate the integration of environmental and social concerns in the process of design, planning, implementation and monitoring and evaluation of projects and programs implemented by the Office and others actors.

Specifically, the ESMF sets the following objectives:

- Describe the procedures for assessing environmental risks;
- Describe the environmental and social management system;
- Describe the methodology for managing environmental and social risks;
- Facilitate the identification and assessment of environmental and social risks, by emphasizing screening, environmental screening, environmental and social assessment and the management of environmental and social impacts;
- Describe the mechanism for managing environmental and social complaints;
- Describe the mitigation measures for the identified negative impacts;
- Provide the appropriate information resources to execute and follow the ESMF recommendations;
- Describe the environmental and social monitoring process;
- Identify the stakeholders in the institutional framework of the ESMF.

### **I.3 Application Scope of the Environmental and Social Management Framework**

BOPE is, according to the decree which creates it, a public establishment with legal personality, its own heritage and financial and administrative autonomy, responsible for monitoring, environmental and social monitoring, but more generally ensure the sustainable management of the environment in general, of natural resources in particular in all national development projects and programs.

As such, the Office can't only submit calls for projects through different funding windows, but also implement projects and programs with public funding. In the case especially of a search for funding, it must respond to a process of pre selection and selection of implementing bodies, ranging from an expression of interest, to the submission of a final budgeted project document.

The Office may also, in seeking funding for tied projects and programs, directly contact donors, technical and financial partners such as the United Nations Development Program (UNDP), the World Bank (WB), and other actors of cooperation, interested in the problematic of the project or program concerned. Finally, as a public structure, the Office can implement a project or program with funding from the state budget, to deal with a national, local, regional or community issue.

This Environmental and Social Management Framework is applied to all projects and programs, regardless of the donor or the technical and financial partner or the source of funding or the area of intervention or orientation of the project or program. This management framework is thus a reference for all the projects and programs that the BOPE must implement. Each project and program, according to its specificities and peculiarities, must develop, according to Office policy guidelines and legislation in force, an Environmental and Social Management Framework. This document, constituting a general framework of reference, gives the general orientations and the methodology which fit pretty well enough with the approach of the OBPE in the elaboration of the Environmental and Social Management Frameworks for the projects and programs of the Office.

## **II REFERENCE FRAMEWORK FOR THE ENVIRONMENTAL AND SOCIAL MANAGEMENT STRATEGY WITHIN THE BOPE**

Within the Office, the Environmental and Social Management Strategy obeys a certain number of rules, a certain approach and a methodology which make it. It fits into a general reference framework, an institutional framework, a political framework and a legislative and regulatory framework. It also adopts a participatory methodology.

The Office's Environmental and Social Management Strategy has as a reference framework several documents, policies and strategies, agreements and conventions, at international, sub-regional, regional and national levels.

### **II.1 International reference framework**

At the international level, the State of Burundi has ratified several treaties, agreements and conventions.

#### **- The International Convention for the Plant Protection (ICPP)**

The International Convention for Plant Protection is an international convention relating to the protection of crops against harmful organisms. It was adopted on December 6th, 1951 and modified on November 28th, 1979 in Rome. It was revised on November 17th, 1997, to come into force on October 2th, 2005.

Burundi's accession to the Convention and its entry into force took place on April 3th, 2006.

#### **- The Ramsar Convention**

The Ramsar Convention, officially the Convention on Wetlands of International Importance Particularly as Water bird Habitat, also commonly known as the Convention on Wetlands, is an international treaty adopted on February 2th, 1971 for the conservation and sustainable use of wetlands, which aims at halting their degradation or disappearance, today and tomorrow, by recognizing their ecological functions as well as their economic, cultural, scientific and recreational value. It obliges the signatory states to maintain the ecological character of their wetlands of international importance and to plan the rational use of all wetlands on their territory. The convention was adopted in 1991 and ratified by Burundi in 1997. It entered into force in Burundi on October 5th, 2002.

Burundi currently has 4 Ramsar sites:

- The Malagarazi Nature Reserve, which is located in the south-east of Burundi in the Moso depression;
- The Protected Aquatic Landscape of the North which is located in Kirundo Province;
- Ruvubu National Park, located in the east of Burundi in the provinces of Ruyigi, Cankuzo, Karusi and Muyinga;
- Rusizi National Park located in Mutimbuzi commune, in Bujumbura province.

### **The Basel Convention**

The Basel Convention, officially the Convention on the Control of Trans boundary Movements of Hazardous Wastes and Their Disposal is an international treaty which was designed to reduce the circulation of hazardous wastes among countries.

The text of the Basel Convention on the Control of Trans boundary Movements of Hazardous Wastes and Their Disposal was adopted on March 22nd, 1989 and entered into force on the ninetieth day after the date of deposit of the twentieth instrument of ratification, of acceptance, formal confirmation, approval or accession, on May 5th, 1992. Burundi ratified it on January 6th, 1997.

### **The Stockholm Convention on Persistent Organic Pollutants (POP)**

The objective of the Stockholm Convention on POPS is to protect human health and the environment from Persistent Organic Pollutants. It is based on the precautionary approach set out in Principle 15 of the Rio Declaration on Environment and Development.

The Convention was adopted on May 22nd, 2001 in Stockholm and ratified by Burundi in February, 2005. The Directorate of Environment and Climate Change of the BOPE is the focal point of the Convention.

### **The Convention on Biological Diversity (CBD)**

This Convention is an international treaty adopted at the Earth Summit in Rio de Janeiro in 1992. The objective of this convention is to develop national strategies for the conservation and sustainable use of biological diversity. Its main goals are the conservation of biodiversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising from the exploitation of genetic resources.

Burundi ratified this convention in 1997. Within the framework of the implementation of this convention, protected areas have been created and specific legislation were put in place.

### **The Paris Convention for the Protection of the World Cultural and Natural Heritage**

The Convention for the Protection of the World Cultural and Natural Heritage is a legal text adopted on November 16th, 1972 by UNESCO. It commits the States which have ratified it to protect the sites and monuments whose safeguard concerns humanity. They thus agree to identify and propose properties located on their national territory and likely to be registered on the World Heritage List. When a State Party proposes a property for registration, it must give details of how the property is legally protected and provide a management plan for its maintenance. States Members must protect the values for which their properties have been registered on the List; they are also encouraged to submit to UNESCO reports on the state of conservation of these properties. Burundi ratified it on May 19th, 1982.

### **The United Nations Convention to Combat Desertification**

The United Nations Convention to Combat Desertification (UNCCD) is the last of the three Rio conventions to be adopted. It was adopted in Paris, two years after the Rio Summit, on June 17th, 1994, and entered into force on December 25th, 1996. It deals with desertification defined as "land degradation in arid, semi-arid and dry sub humid areas as a result of various factors, including climatic variations and human activities" and adapted means of control: "development integrated land in arid, semi-arid and dry sub humid areas for sustainable development that aims at: preventing and / or reducing land degradation, rehabilitating partially degraded land, and restoring desertified land»

Burundi ratified it on October 14, 1994.

### **The Convention for the Protection of Migratory Species (CPMS)**

The Convention on the Conservation of Migratory Species of Wild Animals or the Bonn Convention is an international treaty signed in 1979 to protect migratory animal species. Its purpose is to ensure the conservation of migratory terrestrial, aquatic and aerial species throughout their range.

Since its entry into force in November 1983, the number of signatory countries has greatly increased in Africa, Central America, South America, Asia, Europe, Australia and Oceania.

**CPMS** member countries work jointly for the conservation of migratory species and their habitats by providing strict protection to endangered migratory species listed in Appendix I to the Convention, by

concluding agreements for the conservation and management of species migratory birds included in Appendix II.

### **The Ozone Layer Convention**

The Vienna Convention for the Protection of the Ozone Layer recognizes the need for increased international cooperation to limit the risks that human activities may pose to the ozone layer. This Convention does not contain any binding mechanism, but provides that specific protocols may be annexed to it. It entered into force on September 22, 1988.

Burundi ratified the Vienna Convention and the Montreal Protocol in January 1997, the London amendment, the Copenhagen amendment, the Montreal amendment and the Beijing amendment on January 18th, 2001.

### **The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)**

The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), also known as the Washington Convention, is an intergovernmental agreement designed to ensure that international trade in species listed in its appendices, as well as parts and derivatives thereof, does not harm the conservation of biodiversity and is based on the sustainable use of wild species.

It was signed in Washington on March 3rd, 1973, Amended in Bonn on June 22nd, 1979 and in Gaborone on April 30th, 1983. Burundi ratified it on August 8th, 1988 and the Convention entered into force on November 6, 1988.

### **The United Nations Framework Convention on Climate Change (UNFCCC)**

The United Nations Framework Convention on Climate Change was adopted during the Earth Summit in Rio de Janeiro in 1992. It entered into force on March 21st, 1994. Its objective is to allow the stabilization of gas concentrations at greenhouse effect in the atmosphere at a level which prevents any dangerous anthropogenic disturbance of the climate system (Article 2). It is the responsibility of the Parties to take precautionary measures to prevent or mitigate the causes of climate change and limit their harmful effects (Article 3). By ratifying the Convention, the contracting parties undertake, among other things, to conserve and reinforce sinks and reservoirs of all greenhouse gases, not regulated by the Montreal Protocol, in particular biomass, forests and the Oceans ( article 4).

Burundi ratified it on January 06, 1997 and entered into force on April 7th, 1997.

### **The Cartagena Protocol**

The Cartagena Protocol on Biosafety risks within the Framework of the Convention on Biological Diversity is an international agreement the aim of which is to guarantee the safe handling, transport and use of living modified organisms (LMOs) from modern biotechnologies which can have harmful effects on biological



diversity, taking also into account the risks on human health. It was adopted on January 29th, 2000 and entered into force on September 11th, 2003. It was ratified by Burundi on August 1st, 2008 by Law No. 1/15 ratifying the Cartagena Protocol by the Republic of Burundi.

### **The Nagoya Protocol**

Adopted at the second meeting of the Conference of the Parties to the United Nations Convention on Biological Diversity, on October 29th, 2010, the Nagoya Protocol on Access and Benefit Sharing (ABS), in long form, Nagoya Protocol on access to genetic resources and the fair and equitable sharing of the benefits arising from their use, is an international agreement on biodiversity. The purpose of this protocol is to promote a fair and equitable sharing of the benefits arising from the use of the genetic resources of "plants, animals, bacteria or other organisms", for commercial, research or other purposes.

The Republic of Burundi took part in this protocol by Law n ° 1/21 of June 23rd, 2014 relating to its accession.

### **The SPS Agreement**

The Agreement on the Application of Sanitary and Phytosanitary Measures, or "SPS Agreement", is an international treaty of the World Trade Organization (WTO). It was negotiated during the Uruguay Round of the General Agreement on Tariffs and Trade, and entered into force with the creation of the WTO in early 1995.

The purpose of the agreement is to protect the health and life of people and animals from the health risks of animals and plants. Among other things, it aligns measures related to the presence of pesticide residues, veterinary drugs and contaminants inside and on food. Ratification by Burundi took place in 2017.

### **The Sustainable Development Goals (SDGs)**

The BOPE also refers to the 2030 Agenda, more precisely to the Sustainable Development Goals (SDGs), which want all countries to succeed in meeting the urgent challenges of the Planet. In September 2015, following the Millennium Development Goals (MDGs), the United Nations Sustainable Development Summit adopted a new framework to serve as a benchmark for sustainable development policies between 2015 and 2030, thus taking into account Several dimensions (economic, social, cultural, environmental,

ethical, political, etc.) following an integrated logic, the 2030 agenda presents 17 objectives, 164 targets and 241 indicators.

Burundi has drawn up a SDG prioritization report from 2016 to 2030 because the SDGs can provide a solution to its concerns. The Government of Burundi has chosen to make it a priority and is committed to implementing a strategy consistent with concrete objectives,

so that the actions taken, whether in the Government Action Plan or in other national programs, improve the standard of living of Burundians and give future generations a chance to live in a better Burundi. The new Government Sustainable Development Strategy, referring to the SDGs, is an important tool which aims to enable it to further integrate the principles of sustainable development into its activities..

**Table 1 : Sustainable Development Goals**

Objective 1	: Eradicate poverty in all its forms and around the world.
Objective 2	: End hunger, ensure food security, improve nutrition and promote sustainable agriculture.
Objective 3	: Enable everyone to live in good health and promote the well-being of all at all ages.
Objective 4	: Ensure equal access to quality education for all and promote opportunities for lifelong learning.
Objective 5	: Achieve gender equality and empower all women and girls.
Objective 6	: Guarantee access to water and sanitation for all and ensure sustainable management of water resources.
Objective 7	: Ensure access to affordable, reliable, sustainable and modern energy services for all.
Objective 8	: Promote sustained, shared and sustainable economic growth, full productive employment and decent work for all.
Objective 9	: Build a resilient infrastructure, promote sustainable industrialization that benefits everyone and encourage innovation.
Objective 10	: Reduce inequality across countries and across countries.
Objective 11	: Make cities and human settlements inclusive, safe, resilient and sustainable
Objective 12	: Establish sustainable consumption and production patterns
Objective 13	: Take urgent measures to fight climate change and its sad consequences.
Objective 14	: Conserve and sustainably use the oceans, seas and marine resources for sustainable development.
Objective 15	: Preserve and restore terrestrial ecosystems.
Objective 16	: Promote the advent of peaceful and open societies for sustainable development.
Objective 17	: Strengthen and revitalize the Global Partnership for Sustainable Development.

## II.1.1 Reference framework at sub-regional level

These are conventions, strategies, directives and commitments of the sub-region or regional of which Burundi is a state member.

### **The Convention on the sustainable management of Lake Tanganyika**

Four countries bordering Lake Tanganyika signed the convention on the sustainable management of Lake Tanganyika on June 12th, 2003. The objective of this convention is to ensure the protection and conservation of biological diversity and the sustainable use of natural resources of Lake Tanganyika and its basin on the basis of integrated management and cooperation between the Contracting States (article 2). It is based on a number of principles, in particular:

- As a precaution,
- Polluter pays,
- Preventive actions,
- And participation.

By signing the Convention, each of the four riparian States of Burundi, the DRC, Zambia and Tanzania, undertakes in particular to:

- Ensure that activities within their jurisdiction or under their control do not cause harmful cross-border impacts (Article 6);
- Ensure that waste is not discharged into the lake, unless a permit is issued by the competent authority of the Contracting State concerned, and in agreement with the latter (Article 8);
- Prevent, control and reduce pollution from, among others , factories, handling, transport, use and disposal of toxic or dangerous materials in the Lake Tanganyika basin (Article 8);
- Prevent any cause of excessive sedimentation of the Lake, in particular deforestation, land degradation and destruction of wetlands (article 9);
- Conserve the ecosystems, species of flora and fauna and genetic resources as well as their habitats, in particular those which are endemic, rare, fragile, or with reduced or threatened numbers forming part of the Lake basin; and prevent the introduction, control and elimination of exotic species that threaten the ecosystems, habitats or species and genetic resources that are part of the Lake basin (Article 10);

In the event that a Contracting State (or States) envisage (s) activities which may cause harmful impacts, it must inform the secretariat of the Lake Tanganyika Authority as soon as possible and carry out a study of environmental impact, the procedure of which must involve the public (Articles 14, 15 and 17)

### **The East African Community Establishment Treaty**

The East African Community was initially founded on December 1st, 1967, then broke up in 1977 before being recreated on July 7th, 2000. Burundi, Rwanda, Uganda, Kenya and Tanzania are described in the Treaty as partner States of the Community. Currently South Sudan has joined this community.

Articles 111 to 114 of this treaty speak of cooperation in the environment and management of natural resources, and highlight the need for each State to take concrete action in favor of:

- Environmental problems and natural resources;
- Environmental management;
- Prevention of illicit trade and movements of toxic chemicals, dangerous substances and wastes;
- Natural resource management.

### **The treaty establishing COMIFAC**

This is the treaty on the conservation and sustainable management of forest ecosystems in Central Africa and establishing the Central African Forests Commission (COMIFAC). Its objective is to set up a global legal framework which must govern and consolidate sub-regional cooperation in the field of conservation and sustainable management of forest ecosystems. It was adopted by the Extraordinary Council of Ministers on September 30th, 2004 in Libreville and signed by the Heads of State in February 2005 in Brazzaville. To date, seven (07) of the 10 countries signatory to the said Treaty have already ratified it, namely: Burundi, Cameroon, Congo, Gabon, Equatorial Guinea, the Central African Republic and Chad.

### **The treaty establishing COMESA**

COMESA (Common Market for Eastern and Southern Africa), is an international organization with a regional vocation in East Africa whose objective is to create a customs union between its twenty member countries. The aims and objectives of COMESA are to facilitate the elimination of all structural and institutional shortcomings of member states so that they can achieve collective and sustainable development.

## **The treaty establishing ECCAS**

**The Economic Community of Central African States (ECCAS)** is an international organization created on October 18th, 1983 for the economic, social and cultural development of Africa with a view to creating regional structures which can gradually lead to a Common Market. The fundamental objective pursued by the Community concerns the promotion and strengthening of harmonious cooperation and dynamic, balanced and self-sustaining development in all areas of economic and social activity, in particular in the fields of industry, transport and communications, energy, agriculture, natural resources, trade, customs, monetary and financial matters, human resources, tourism, education, culture, science and technology and the movement of people, with a view to achieving collective autonomy and raising the standard of living of populations.

### **II.1.2 Reference framework at national level**

#### **II.1.2.1 *Political framework***

The political framework refers to all the strategies, policies and guidelines for the environment developed and adopted by the Republic of Burundi. Among others, the following components are noted.

#### **The National Environment Strategy and Action Plan of Burundi**

Burundi developed its environmental strategy in 1997, which consists of a diagnosis and the strategy proper, then supplemented by an action plan. The diagnosis presents the basic data, then the various direct causes which modify the environment in Burundi and finally the effects.

The goal was to put in place a coherent tool allowing to amplify actions in favor of the restoration of the environment and the efficient management of natural resources from the end of the crisis. To implement the National Environment Strategy in Burundi (NESB), a law carrying the environment code was passed. It aims for sustainable development through the rational use of environmental resources that meet the needs of present and future generations.

With a view to the protection and sustainable management of the environment, the various principles mentioned in the NSEB mention that the State, local communities, public and para public organizations as well as private operators must among others:

- Rational use of natural resources while ensuring their economic efficiency in accordance with the requirements of conservation and improvement of the quality of the environment;

- Adopt production technologies that do not pollute the environment;
- Take the necessary measures for the prevention or limitation of phenomena likely to harm the environment;
- Recover and Value, as far as possible, the usable substances contained in waste or in residues from economic and social activities;
- Integrate environmental protection into their projects and set up programs to ensure better knowledge of the Burundi environment;
- Adopt the appropriate measures to inform and educate citizens with a view to their active participation in the preservation and enhancement of the Burundian environment.

The analysis of the National Environment Strategy in Burundi NSEB then relates to the following sectors:

- Land and water management;
- Agriculture, animal husbandry and forestry;
- Industries and commerce;
- Human habitat and health;
- Heritage (biological and cultural) and tourism;
- Research and communication;
- Complementary socio-economic strategies.

The environmental action plan is structured as follows: the principles concerning the design and approach of the actions, the general comments by thematic program and the following thematic programs:

- Integrated environmental management;
- Land and water;
- Wood and energy;
- Agricultural production;
- Industry and commerce;
- Human settlements and health;
- Biodiversity and heritage;
- Science, education, commerce.

## **The National Water Resources Management Policy**

Its overall objective is to guarantee that the water needs of all water users are covered by the harmonious development of national water resources.

## **The National Forest Policy (NFP)**

The Republic of Burundi has drawn up the forest policy which is in harmony with the main national development policy documents, such as the 2025 vision. It is based on principles of sustainable management of forest resources and sharing of benefits, roles and responsibilities between stakeholders.

The NFP aims at ensuring the sustainability of existing forest resources and the development of new resources to ensure the socio-economic and ecological functions of present and future populations. Specifically, it aims at planning the development of the forest sector in order to meet the needs of the populations and of the country while perpetuating the resource, developing and rationally managing the forest resources and developing the forest resources.

## **The National Strategy and Action Plan on Biodiversity 2013-2020**

The National Strategy and Action Plan on Biodiversity 2013-2020 has as a first strategic axis: "To encourage the involvement and commitment of all stakeholders, including decision-makers in conservation and use of the action biodiversity. " It is operationalized through the Biodiversity Integration Sector Plan at the highest decision-making bodies.

## **The National Climate Change Policy and its strategy**

In 2012, Burundi initiated, with the support of COMESA, the development of its National Policy on climate change which is a framework of reference for the integration of climate change in all sectors of socio-economic life of country. This policy provides the vision, principles and strategic directions as defined by the Government, as well as the mechanisms for its implementation and in particular the appropriate institutional framework.

It is built around the following vision: "a State which promotes development resilient to the harmful effects of climate change".

### **II.1.2.2 Legislative and regulatory framework**

These are all legislative and regulatory texts which regulate or have an impact on the environment and the protection of natural resources.

#### **The Constitution of the Republic of Burundi**

The fundamental law of Burundi is the first legislative and regulatory framework of reference. It imposes an eco-responsible approach ensuring the protection and preservation of the environment, to any intervention in the country. Article 35 stipulates that the State ensures the good management and the rational exploitation of the country's natural resources, while preserving the environment and the conservation of these resources for generations to come.

#### **Law n ° 1/010 of 06/30/2000 on the environment code of the Republic of Burundi**

The environmental code fixes the fundamental rules intended to allow the management of the environment and the protection of this one against all the forms of degradations, in order to safeguard and enhance the rational exploitation of natural resources, to fight against the different forms of pollution and nuisance and thus improve the living conditions of the human person, while respecting the balance of ecosystems.

It is adopted through law n ° 1/1010 of June 30, 2000. The BOPE has the prerogative to enforce the environmental code, in the sense that it is the institution of the ministry responsible for environment, which must ensure that the various stakeholders in development comply with environmental regulations and standards.

#### **Decree No. 100/240 of October 29, 2014 establishing, missions, organization and operation of the Burundian Office for the Protection of the Environment which describes the organization and missions of the BOPE.**

By this decree, the BOPE understands its attributions and missions. Its actions therefore refer to the prerogatives that this decree gives it.

#### **Law n°1/10 of May 30, 2011 establishing and managing protected areas in Burundi**

This law governs the creation and operation of protected areas. It provides for several provisions, one of which stipulates that protected areas must be considered in the overall development plan and their



management must go with the development of the riparian human environment, and participatory management of protected areas must be concerned with improving the framework. Life of local communities (article 29).

### **Law n° 1/07 of July 15, 2016 revising the Forest Code**

The Forest Code regulates the use of afforestation land in the public domain of the State, Communes and public establishments. For example, note the content of the following articles.

**Article 33:** On land in the State forest domain, no one has the right to establish or cultivate the soil; however, the exercise of accessory forestry activities consisting in the harvesting of seeds, edible plants and fruits, medicinal plants, lianas, reeds, bamboos as well as beekeeping, is free there subject to specific regulations governing these matters.

**Article 53:** The state forest domain is exempt from all usage rights relating to forest soil.

**Article 58:** No concession of right of use of any kind and under any pretext whatsoever may be made in afforestation, land to be afforested or to be restored belonging to municipalities and public establishments.

**Article 88:** Any clearing of forest areas of the State, municipalities, public and private establishments whose area exceeds half a hectare is subject to a clearing permit, issued by the Minister having forests in his attributions and whose grant is subject to the completion of an environmental impact study.

**Article 106:** The wandering of domestic animals is prohibited in the forest areas of the State, municipalities, public and private establishments.

### **Law n° 1/21 of October 15, 2013 on the Mining Code of Burundi**

This law is also a framework of reference for BOPE in that it governs everything related to the exploitation of mines and quarries. It also has effects on the environment, especially since in certain provinces, artisanal mining activities are observed and cause conflicts with farmers. Certain articles illustrate well the need for the OBPE to refer to this law. For example:

**Article 90:** The holder of a small-scale mining permit must use mineral substances rationally while respecting, in particular, public health and environmental protection standards,

**Article 91:** The holder of an artisanal exploitation permit may not, under any circumstances, engage in his activities on cultivated land or hinder irrigation. In the event of damage caused by the holder of an operating permit, he must repair it.

**Article 137:** All applicants for a quarrying permit must undertake not to irreversibly harm the environment, not to contribute to causing erosion and to restore the perimeter.

**Article 138:** All quarry exploitation authorization application files must include a simplified environmental impact study.

**Article 113:** At the expiration of the license to operate a quarry, its holder must carry out, at his own expense, work for public safety and the rehabilitation of the site in accordance with the prescriptions relating to the protection of the environment and the conservation of the quarry and the isolation of the various permeable levels.

#### **Law n°1/02 of March 26, 2012 on the Burundi Water Code and its implementing texts**

The management and use of water are based on certain principles (article 2) that the BOPE must respect and ensure respect, including the principle of sampler-payer (which considers that water has a cost that must be paid by the user), the principle of sustainability (which stipulates that water being recognized as an exhaustible resource, appropriate measures must be taken at all levels to ensure efficient management of resources and infrastructure, and reduce the costs of water services), and the principle of responsibility which aims to avoid waste and activities linked to water resources. It also aims, in the event of damage to the environment, to set up mechanisms to repair this damage either by compensating the victims or by compensation measures in kind. There is also the polluter- payer principle that those responsible for polluting water resources pay for the damage caused.

The Water Code provides, among other things, for a protection zone 150 m wide on the shores of Lake Tanganyika, 50 m for the other lakes, 25 m on each of the edges of the tributary rivers of 5 m for non-tributary rivers of Lake Tanganyika (art 5, paragraph 3). The delimitation of such protection zones is the responsibility of the Ministry having water in its attributions and is done in compliance with the rights regularly acquired (article 11). In implementing its projects and programs, the BOPE will try to avoid making investments in these areas, with the exception of irrigation works.

## **Decree n°100/22 of October 7, 2010 relating to measures for the application of the environment code in relation to the environmental impact study procedure**

This decree, in its articles 4 and 5, classifies the projects in two categories:

- Projects that must be submitted to an Environmental Impact Assessment regardless of the cost of their completion (Annex I);
- Projects which are subject to the Environmental Impact Assessment when the Ministry of the Environment considers that the characteristics, location or even the scale of the proposed works are likely to harm the environment (appendix II). Implicitly, although not mentioned, there is a third category of projects that should not be subject to EIA (those that are neither in Annex I nor in Annex II).

## **Ministerial decision n°770/083 of 01/09/2013 on the framing in the environmental impact study procedure in Burundi.**

This decision establishes the framing by combined method in Burundi, which is an open and interactive process, which serves to limit, frame the field of the Environmental and Social Impact Study, to provide directives on how to conduct the study, and to facilitate the evaluation of the quality of the study.

In addition to these texts, we also note for the BOPE, the reference:

- Decree n ° 100/189 of August 25th, 2014 relating to the procedures for determining and establishing protection perimeters for water intakes intended for human consumption;
- To Decree 100/177 of July 9th, 2013 on sanitary inspection measures for animals and food products of animal origin;
- Decree No. 100/99 of March 31st, 2013 establishing, missions, organization and operation of the National Committee for the Coordination and Monitoring of sanitary and phytosanitary measures;
- Legislative Decree No. 1/033 of June 30th, 1993 on the protection of plants in Burundi;
- Law No. 1/28 of 12/24/2009 relating to the sanitary police of domestic, wild and aqua cultural animals and bees;
- Law N ° 1/06 of March 21st, 2011 regulating the exercise of the veterinary profession;
- Law No. 1/03 of 04 January 2001 on the national standardization system, metrology, quality assurance and testing;
- To Joint Order No. 340 of 05/11/2013 relating to the quality control of the products sold;
- Joint Ministerial Ordinance No. 770/468 of March 25, 2014 setting standards for the discharge of domestic and industrial wastewater in Burundi;

- To the Ministerial Ordinance n° 770/640/2014 of April 23, 2014 relating to authorization and concession terms on waters in the public hydraulic domain.

## **II.2 Institutional framework of the environmental and social risk management system**

### **II.2.1 Institutional organization**

Depending on the project or program implemented, its specificities, its requirements, its field of intervention, its themes, etc., the management of environmental and social risks in the logic of BOPE, calls upon several institutional actors according to the participatory, inclusive and collaborative approach.

In all cases, the ministry in charge of the environment, the institutional anchor of the Office, is the first institutional actor. It is responsible for monitoring the implementation of the country's environmental policy and compliance by all stakeholders with environmental standards. Its organization includes two strategic departments: The Forestry Department (in charge of the management of protected areas and forests) and the Environment and Climate Change Department (DECC) (in charge of Environmental Impact Studies, monitoring and environmental monitoring, climate change, environmental standards, etc.) as mentioned in the decree establishing the Office.

To properly manage environmental and social impacts, the participatory and inclusive approach is advocated by the BOPE. Thus, technical services at national and provincial levels are mobilized. Depending on the projects and programs, technicians from different sectoral ministries can be mobilized: the Ministries in charge of agriculture; livestock; energy, mines, water, health, state domains, land affairs, regional planning, town planning, administration, disaster management, etc.

Also, communities, through civil society organizations, professional associations, etc. are invited.

### **II.2.2 Components of the Environmental and Social Management System**

The BOPE Environmental and Social Management System corresponds to the mechanisms and practices, making it possible to implement or apply the strategy for identifying and managing environmental and social impacts, with a view to development. The system is thus a set of procedures and processes enabling the Office to identify, assess, prioritize, classify environmental and social risks, develop and implement management and control strategies of these risks. It is based on the principle of continuous improvement, through a systematic process of examination and correction. Overall, the ESMS thus allows the Office to be able to assess, inventory, assess, control and manage environmental and social risks, in order to continuously improve its performance, and this, at all stages of its project cycle.

The ESMS has eight (08) major linked components, each playing a decisive role.

1. The first component corresponds to the mechanism for identifying environmental and social risks. It is through this component that all environmental and social risks are inventoried before the second component comes into play.
2. The second component corresponds to the mechanism for developing environmental and social risk management strategies. It allows the assumption or the treatment of the identified risks.
3. The third component corresponds to the political and organizational aspects. The political aspects refer to the fact that the Office refers to the environmental conditions in force in Burundi, but also to the accepted international standards in terms of environmental and social strategy. Organizational aspects refer to the general organization of the Office, facilitating environmental and social management.
4. The fourth component allows the participation, in the whole process of environmental and social risk management, of all stakeholders, particularly communities.
5. The fifth component corresponds to the mechanism allowing permanent communication with communities, especially those impacted by environmental and social risks.
6. The sixth component corresponds to the mechanism facilitating the external communication of the project. It is important because it makes it possible to anticipate on several risks, but also on the continuous acceptance of the measures and strategies of care and management. It also facilitates the escalation of environmental complaints and grievances, for effective management.
7. The seventh component corresponds to the mechanism facilitating monitoring, evaluation and final evaluation of actions carried out in the context of environmental and social risk management. It also makes it possible to document the different experiences.
8. The eighth component relates to the mechanism facilitating awareness, the ability and communication for the behavior change, it then generally allows to build capacities of communities on the themes related to the environmental and social risks.

### **III OPERATIONALIZATION OF THE ENVIRONMENTAL AND SOCIAL MANAGEMENT POLICY WITHIN THE BOPE**

The BOPE Environmental and Social Management Policy is in accordance with the guidelines and requirements of decree n ° 100/22 of 07 October 2010 relating to the application of the Environment Code in connection with the study procedure of environmental impact, and ministerial decision n ° 770/083 relating to the framing in the Environmental Impact Study procedure in Burundi.

The decree determines the conditions and procedures for implementing the environmental impact study procedure, as set out in Chapter 3 of Title II of Law No. 1/010 of June 30, 2000 on the Environment Code of the Republic of Burundi.

Environmental impact studies governed by the Environment Code and by decree mentioned above, are carried out prior to any administrative authorization required from the planned works. Failure to carry out the impact study, to validate it in accordance with the provisions of the Environment Code and of any authorization resulting therefrom by the Ministry of the Environment constitute substantive flaws affecting the regularity of the procedure of the aforementioned authorization.

The environmental impact study is a prerequisite for the start of any BOPE project, as presented in article 13. The Environmental Impact Study report is submitted (in 3 copies) to the Ministry in charge of the environment, for examination for the purposes of its approval (article 19). This examination is carried out within a period not exceeding 3 months from the date of closure of the planned publicity measures (Article 26). Once the EIS report has been approved, it becomes a legal act and requires the petitioner or contracting authority to respect and execute the measures set out (Article 29).

#### **III.1 Analysis and selection work**

Not all the projects have the same level and degree of impact on the environment. Some have very significant negative impacts, others have medium negative impacts and others do not have significant environmental impacts. It is for this reason that it is important for the Office to sort through and apply itself to determining the level of environmental and social analysis required for each project or program to be carried out.

The Republic of Burundi, by decree n°100/22 of October 07, 2010, considers:

- The projects in Annex I to the decree, which we call category I projects, which must be subject to an Environmental Impact Assessment whatever the cost of their realization;
- The projects of appendix II of the decree, which we call category II project, which are subjected to the Environmental Impact Study when the Ministry of the environment considers that the characteristics, the location or even the extent of the proposed works are likely to harm the environment.
- The others, which we call category III project, which do not necessarily have to be the subject of an Environmental and Social Impact Assessment.

**Annex I** to the decree lists 23 types of projects which are as follows.

1. Construction works of public works or infrastructure such as roads, dams, dikes, bridges and airports, as governed by article 34 of the Environment Code.
2. Development plans for rural or urban land involving the allocation of land for industrial installation purposes, in accordance with article 34 of the Environment Code.
3. The exploitation of mines, quarries or other permissible substances, under the conditions determined by articles 35 and 36 of the environment code.
4. Works and installations which, in accordance with article 52 of the Environment Code, are likely to modify the balances of the hydraulic networks of lakes and watercourses, to alter the configuration of their banks or to harm the preservation of aquatic species.
5. The clearing of protective forests as well as of forests or afforestation referred to in article 71 of the environment code and which have been the subject of a management plan under the conditions and procedures established by the forest code.
6. Installations classified for the protection of the environment belonging to the first class, as regulated in Chapter 1 of Title V of the Environment Code, especially through articles 107 to 111 of the said code.
7. The sites or facilities for storage and treatment of waste provided for in article 124 of the environment code as well as the wastewater treatment plants in urban areas and industrial tributaries.
8. The works, installations, development plans and other operating works subject to the impact study under sectoral codes and laws specifically governing the management of the various components of the environment.
9. Rural consolidation projects

Land clearing and planned changes in the allocation of land larger than 10 hectares, as well as reforestation operations larger than this same area.

11. Thermal power stations and other combustion plants with a heat output of at least 200 MW, as well as the construction of hydraulic power stations.

12. Installations for the manufacture or storage of chemicals, pesticides or other substances deemed dangerous by the sectoral administrative authorities.

13. Establishments of sugar factories.

14. The tannery and tanning units.

15. The construction of hotels with a capacity greater than 50 beds.

16. Storage of powders and explosives.

17. The establishment of breweries.

18. Subdivision projects for the establishment of cities or urban centers.

19. Marshland development projects.

20. Establishments for processing natural and artificial textile fibers.

21. The establishment of slaughterhouses in urban areas.

22. The establishment of cement factories.

23. The establishment of coffee pulping plants.

Annex II of the decree lists a list of 14 types of projects which are as follows.

1. Drilling for water supply and geothermal drilling.

2. Installations for the production of energy other than those referred to in Annex I.

3. Biogas production facilities.

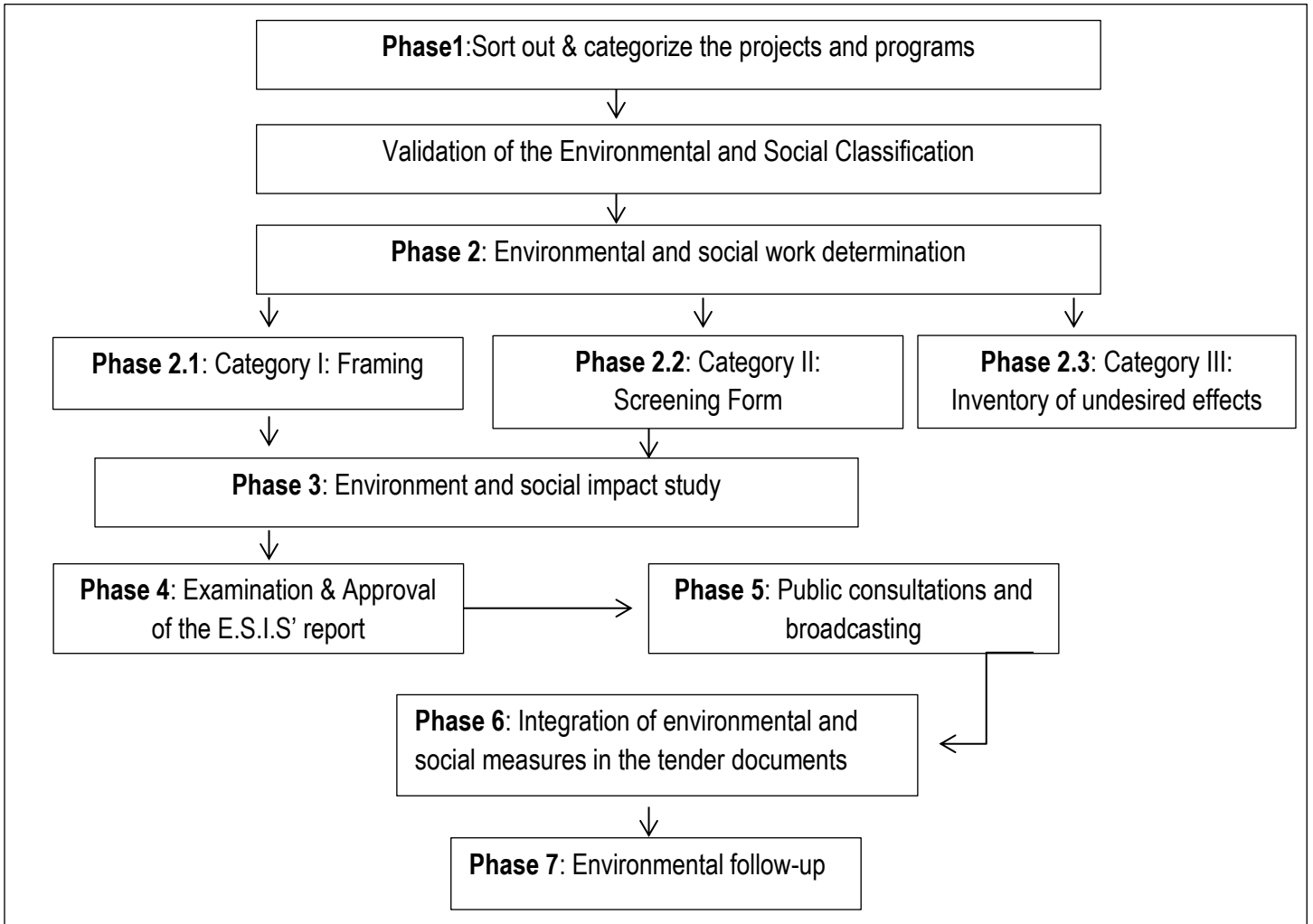
4. The exploitation of marshes over an area of at least 5 hectares.



5. Storage facilities for aerial or underground tanks of hydrocarbons and combustible gases.
6. Installations intended for the transport and distribution of electrical energy by overhead lines.
7. Metal stamping or rendering workshops.
8. Boiler and sheet metal installations.
9. Projects for the establishment of cemeteries.
10. Food processing and storage facilities.
11. The establishment and operation of industrial or commercial brick and tile plants.
12. Pigsties with more than 500 animals and poultry holdings exceeding 1000 units.
13. The establishment of slaughterhouses in rural areas.
14. Land restoration operations in the mountains.

### **III.2 Environmental and Social Impact Assessment Process: from screening to environmental validation**

Taking into account a well-provided reference framework, the BOPE ensures that its projects and programs comply with the environmental and social impact assessment process, in order to guarantee the effective consideration of environmental and social requirements in the project cycle. This process, which includes seven (7) phases, is shown below:



**Figure 1: Process for ESIA**

**Phase 1:** In this phase, it is a question of sorting or categorizing the projects, before proceeding to the validation of the environmental and social classification.

**Phase 2:** In this phase, on the basis of the classification, the environmental and social work is determined. There are three options.

**Option 1:** if the project is in category I, then a framing is done. The main tasks of scoping are: to make available information on the project (which will allow the ministry in charge of Scoping to provide information on the project and to develop detailed terms of reference for the conduct of the ESIS , and this on the basis of stakeholder consultations and standard terms of reference (the environment to assess the proposed terms of reference), to propose (based on the standard terms of reference) a long list of impacts to be studied, to propose the elements which must be specific for the project (using standardized directives,

with the option of consultation with the ministry in charge of the environment, to organize consultations with the public and field visits, to develop and share TORs, to have the ministry in charge of the environment approve TORs. The terms of reference drawn up are sent to the ministry responsible for the environment (for approval within a maximum of one month. If after a month the Ministry does not react, the terms of reference are assumed to be approved. The ministry in charge of the environment has developed standard TORs annexed (see annex 4).

**Option 2:** if the project is in category II, then prepare a screening sheet for the sub-project or Environmental Impact Notice (EIN). The screening sheet (see Annex 3) describes the sub-project and its potential direct or indirect impacts on the environment. It defines the terms and conditions for carrying out the sub-project, including the measures applied to prevent, mitigate, correct or compensate for the negative impacts on the environment and the alternatives that could remedy these impacts. The sheet is then sent to the Ministry in charge of the environment with a copy (s) to the Ministry (s) responsible for the structure carrying the sub-project. Within a maximum period of one month, the Minister responsible for the environment must decide whether or not there is a need for an ESIS for the sub-project. If the ESIS is not necessary or if the Ministry does not react within the deadlines, the project is authorized to start and the measures presented in the sheet are retained as constituting the Environmental and Social Management Plan must be carried out. If the ESIS is required, the Ministry specifies for the petitioner the reasons which justify the use of this procedure.

The decision also specifies the expected content of the ESIS, including the need to define the methods and measures for preventing, reducing and / or compensating for the negative impacts of the project on the environment.

**Option 3:** if the project is neither in category I nor in category II, then we assume that it is in category III. Thus, national law and regulations do not provide for any environmental assessment action. For these projects, the BOPE is working to identify the undesirable effects (even if they are considered minimal) and to plan measures to avoid them or make them even less important. Often these are the precautions to take into account in the technical design of the project.

**Phase 3:** In this phase, it is a question of carrying out the ESIS. Article 16 of Decree No. 100/22 of 07 October 2010 gives more details regarding the steps to be followed by mentioning certain elements to be analyzed during an Environmental and Social Impact Assessment. These are essentially the following:

- The description of the project and the reasons for its choice;

- The analysis of the initial state of the site and its natural (biophysical) and human (socioeconomic and cultural) environment;
- The analysis of the evolution of the site environment in the absence of the project;
- Identification, analysis and evaluation of the possible and potential effects of the implementation of the project on the natural and human environment;
- The identification of the measures planned to avoid, reduce or eliminate the harmful effects and those planned to optimize the favorable effects on the environment;
- The Environmental and Social Management Plan;
- Summary in non-technical language;
- The summary of public consultations, including comments and recommendations received from people affected or interested in the project.

**Phase 4:** In this phase, the TORs are reviewed and approved. The TORs are validated by the ministry in charge of the environment.

**Phase 5:** In this phase, public consultation takes place. National regulations (decree of 07 October relating to the Environmental Impact Assessment procedure, articles 15, 16 and 22) require that, as soon as the preparation of the impact study begins, the client or the petitioner informs the public about the nature of the project and the proposed study, and requests comments and possible recommendations from people and communities who could be adversely affected as a result of the implementation of the project and the effects thereof arise. The comments and recommendations of those consulted are taken into account in carrying out the impact study and recorded in the final report, in a specific chapter. In addition, the submission of the ESIS file to the authority must be published by posting or through national newspapers within 15 days of the submission. Any interested natural or legal person can consult the ESIS file and give comments on it in accordance with the procedures determined by the authority and within one month (count from the date of publication). The publication is made by the authority but the petitioner or contracting authority must pay the related costs.

Thus, public consultations must be done during the framing and during the conduct of the ESIS itself. The public should also be informed of the filing of the ESIS report and have the right to consult and comment on it.

**Phase 6:** This is the phase which notes the integration of environmental and social provisions in the Tender Documents (Tender Documents). The BOPE is working in this phase to integrate the recommendations and other environmental and social management measures from the ESIS into the Tender Documents and the execution of works by the companies.

**Phase 7:** It corresponds to environmental monitoring, which makes it possible to verify and assess the effectiveness, efficiency and efficiency of the implementation of environmental and social measures.

### **III.3 Environmental and Social Impacts and Mitigation and Consolidation Measures**

In general, the projects implemented can generate many environmental and social impacts. These impacts, on the human environment but also on the environment, can be positive but also negative, with levels of significance which can also be minor or major.

#### **III.3.1 Positive environmental and social impacts**

Positive environmental and social impacts are direct and indirect desirable, temporary and permanent, short, medium and long term effects, arising from the activities implemented in the execution of a project. For each component, each strategic axis and each action or activity of the project concerned, the BOPE sets out to describe and analyze the different positive impacts.

**Table 2: Example of some positive impacts of the multi sectoral water and energy Infrastructure project**

#### **Rehabilitation of hydroelectric plants**

##### **Socio-economically:**

All the work carried out to rehabilitate the structures will have a beneficial effect on the supply of electrical energy and therefore on the improvement of the lives of households as a whole. And on an ad hoc basis, the rehabilitation of hydroelectric power stations may offer opportunities for the supply of electrical energy to the surrounding populations who have been asking for it for a long time.

##### **On the environmental level:**

The gas with a significant greenhouse effect (sulfur hexafluoride) used today as an insulator at the level of circuit breakers can be replaced and can therefore no longer be used. Likewise, the nuisance caused by sewage and turbined water flowing into rivers can be corrected in the interest of local residents.

##### **Kabu 16 hydroelectric development**

The significant positive impact of the works is the creation of jobs. The increase in income resulting from job creation will have to contribute to the fight against poverty.

In addition, this work will have a second positive impact in terms of increasing the income of the populations through the use of local materials. Whether borrowing materials (stone, sand, gravel, laterite) or purchasing materials on the local market (cement, treated wood, steel, etc.) the works will have the effect of injecting fresh money in local markets. This will contribute to the development of socio-economic activities more directly for the trade in materials.

To a lesser extent, the construction phase will have the effect of promoting the development of small businesses for women around construction sites. This positive impact, even if limited, directly affects the

populations living near neighborhoods.

#### **Rehabilitation of production plants and water pumping stations**

This program mainly concerns pumping stations. The works will be geographically limited to already existing sites and apart from the risks of pollution resulting from the accumulation of waste materials used, there is no reason to predict major impacts. It should be noted here the human gain from these works to rehabilitate water treatment plants and pumped water pumping stations. Indeed, the city of Bujumbura is supplied with water from Lake Tanganyika, the Ntakangwa river and mountain springs. But the raw water taken from these sources (Lake Tanganyika, from the Ntakangwa River) is not fit for consumption. It must first pass through these treatment and purification stations (factories) before being sent to distribution centers. We can easily understand the importance of the rehabilitation of these factories for the health of the population, and therefore the positive impact that this has on the quality of life of the populations.

### **III.3.2 Negative environmental and social impacts**

Negative environmental and social impacts are direct and indirect, temporary and permanent, short, medium and long-term undesirable effects on the environment and on communities, resulting from the activities implemented within the framework of the execution of a project. They generally come from socio-economic infrastructure construction activities, hydro-agricultural developments, water management, management of forests and pastures and renewable energies, etc.

As with the positive impacts, for each component, each strategic axis and each action or activity of the project concerned, the potential negative impacts are listed and analyzed for taking contingency or mitigation measures.

There are generally two types of negative impact: global negative impacts and specific negative impacts. The overall negative impacts correspond, for example, to the general risks of degradation or disturbance of cultural sites and archaeological monuments, likely to create social conflicts with communities; and the risk of loss of land and assets in the event of expropriation for the purposes of the project activities concerned. The specific negative impacts correspond to the environmental and social risks that may arise from specific activities of the project concerned (see appendices 1 and 2).

### III.3.3 Analysis of positive and negative impacts

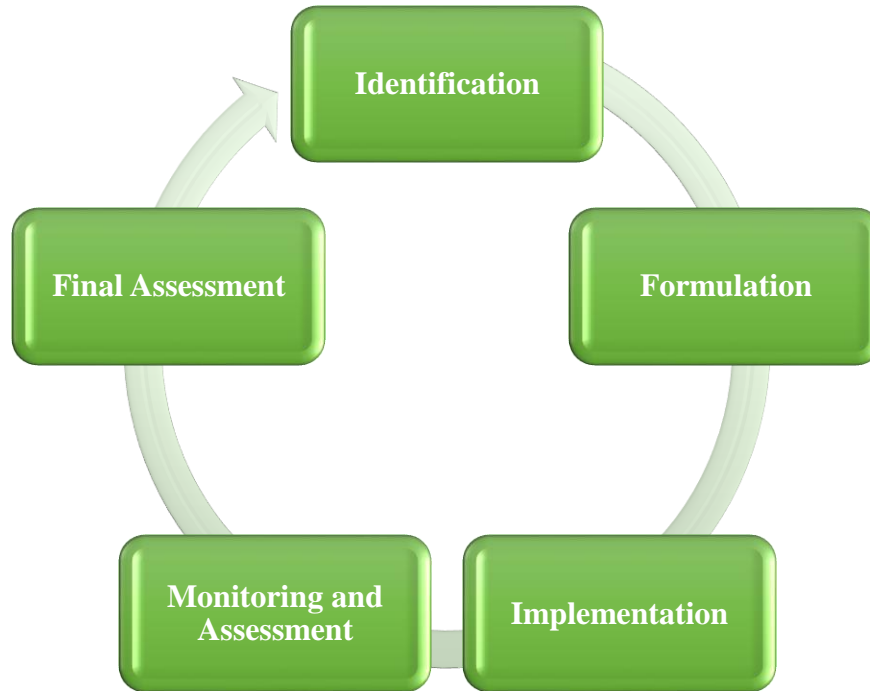
Before taking any measurement, the positive and negative environmental impacts are analyzed to be characterized. Each type of impact is thus qualified, for an overall assessment which will define the scope of the mitigation or mitigation measure to be taken.

**Table 3: Analysis grid for environmental and social impacts**

Activity	
Nature of impact	
Positive/ negative	
Issue identified	
Global appreciation	

### III.4 Environmental and social risk management at each stage of the project cycle

The project cycle is the logical chain tracing the entire course of an implemented project or program, from start to finish. It corresponds to the sequence, according to a methodical, coherent and clear arrangement, of the phases or stages of execution of a project or program, from the characterization of the problems to be solved or the needs to be satisfied until their effective management, in a logic of sustainability, each phase being the subject of a serious piloting requiring its own methodology. The project cycle is thus an ongoing process during which each stage conditions the next stage. It can be schematized as follows

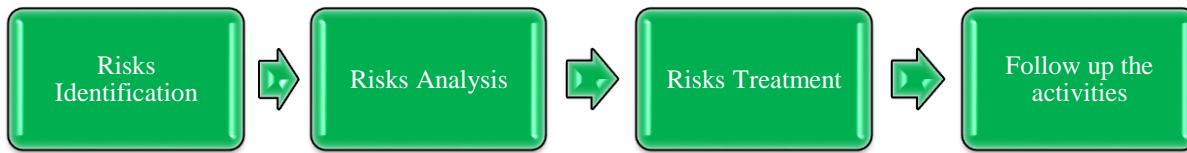


**Figure 2: The project cycle**

In each of these stages of the project, environmental and social risk management must be taken into account. It begins with an inventory of the environmental and social risks associated with the stage. This participatory inventory provides a more or less exhaustive list of these risks.

An environmental and social risk corresponds, for a project, to a factor that could very likely have negative impacts on the environment, on social aspects or on the prospects for sustainable development. It corresponds to a reunion of several sets including a scenario or event that can probably occur, a probability of occurrence of this event and a consequence or measure of the damage caused by the occurrence of the event. Thus, for each environmental and social risk, the BOPE promotes the implementation of management strategies. Environmental and social risk management is the selection and implementation of risk control strategies, along with mechanisms for monitoring and evaluating the effectiveness of these strategies.





**Figure 3: Environmental and social risk management process**

**Identification** is the recognition and description of the risk considered. It makes it possible to make an inventory of all the environmental and social risks that could probably arise.

**The analysis** corresponds to the characterization, assessment and prioritization of the risks identified. This allows the estimation of the magnitude of the risks, as well as the classification according to the severity or the probability of occurrence.

**Treatment** is the making of decisions about the acceptability of risks, and measures to mitigate or eliminate them.

**Monitoring** the actions taken in the treatment stage of the risk management process makes it possible to periodically measure the severity of the risks so as to review, adjust, increase or decrease the prevention and mitigation actions.

### III.4.1 Step 1: Identification

This step corresponds to the definition and specification of the problem that the project to be implemented seeks to solve or the need that it seeks to satisfy. It analyzes the feasibility of the project, on the basis of a deep diagnosis which includes the situational analysis, the analysis of the stakeholders and target groups, the analysis of the problems or needs. It provides important information for planning the conduct of the project.

During this stage, the risks generally associated are the following:

- Neglect of taking into account of environmental aspects and causes in the diagnosis and analysis of problems;
- The concealment of environmental and social issues in the development or amplification of the problems or needs of the communities;
- The lack of stakeholder participation.

The consideration of the environmental and social dimension, in this stage, within the BOPE, is done with the development of terms of reference, highlighting the environmental and social concerns and approved by the lessor or the technical and financial partner. . It is also done by encouraging a participatory approach recording the involvement of all stakeholders, by a preliminary environmental diagnosis based on preliminary consultations field recognition (this diagnosis is made with different tools such as transect, flow diagram, resource map, etc.) and the initial summary description of the project. Such an approach makes it possible to classify the project and determine the level of environmental assessment to be made, according to the degree of impact or damage to the environment. The strategy for managing each environmental and social risk noted will be recorded in the project document.

#### **III.4.2 Step 2: The formulation**

This phase corresponds to the preparation and writing of the project proposal for approval and fundraising. It finds its substance in strategic planning which corresponds to the conception, the elaboration and the development of a strategy and an approach for the implementation of a set of actions composing the project or a program, in the optics of achieving the desired change. It is from this stage that the environmental and social issues identified in the previous stage, must be effectively taken care of, through a clear formulation of mitigation or mitigation measures.

Thus in this stage of the project cycle, it is of great importance, for the BOPE, to ensure that the best environmental and social management strategies are adopted and will accompany, throughout the implementation, the project or program. This starts with the review of the institutional arrangements for implementing environmental and social requirements. This also requires the establishment of mechanisms to collect environmental and social complaints and claims that may come from communities. The effective application of these strategies is done in the stage of the concrete implementation of the actions of projects and programs.

#### **III.4.3 Step 3: Implementation**

Implementation corresponds to the completion of the project in accordance with the overall strategy, objectives and expected results. It is facilitated by operational planning, which is the art of planning a project to make it executable and controllable, or the process by which, periodically (the operational plan can cover the duration of the project or be done annually), its priorities and objectives, in concrete and effective operational activities.

During this stage, for each action or activity with potential social and / or environmental impact, concrete management measures are taken. These measures range from impact assessment to their effective management.

In an operational way, the BOPE promotes, in its participative approach, information and sharing sessions, to raise awareness among institutional actors, technical actors, social actors, communities, on project activities, their duration and programming, the potential impacts, the recommended measures, the roles and responsibilities of each in the implementation. It also sets up, using a participatory approach that empowers communities at the first level, complaints and claims management mechanism to better address environmental and social concerns.

#### **III.4.4 Step 4: Monitoring and evaluation**

Monitoring and evaluation is a constant review of the project or program throughout its implementation, assessing the progressively achieved results, based on the objectives to be achieved, evaluation questions and indicators. This constant review, for the BOPE, also concerns the monitoring and control of the implementation of environmental and social management strategies. At this stage of the project cycle, it is therefore a question of ensuring compliance with environmental requirements and commitments, but also the effective implementation of management, mitigation and / or adaptation measures, by close monitoring. An environmental and social monitoring sheet is generally used in this step.

This monitoring makes it possible to verify whether the planned management, mitigation and /or adaptation measures are taken and correctly implemented. It is therefore close environmental and social control that is done at this level, and whose action challenges all the actors involved in the implementation of projects or programs.

This BOPE approach thus shows the priority given to proximity surveillance directly involving the stakeholders. In some cases, projects and programs may provide for monitoring by control offices with the requisite skills in environmental and social management. These offices are therefore recruited to monitor the effectiveness and efficiency of the implementation of environmental and social measures and compliance with the directives and other environmental prescriptions contained in the strategy.

In all cases, the monitoring reports resulting from the control activities provide information on the findings of compliance and the shortcomings noted, the responsibilities relating thereto and the recommendations for correction or improvement.

Social aspects are also monitored in the implementation of projects and programs. This monitoring pays particular attention to the participation of beneficiary communities (both in the implementation of actions and activities as well as in monitoring), particularly the most vulnerable groups, and on taking into account the gender dimension.

#### **III.4.5 Step 5: Final evaluation**

The final assessment is the last step in the project cycle. It takes stock of the entire period of implementation of projects or programs, to assess and measure the achievement of objectives and make recommendations for the next projects or programs to be implemented.

The final evaluation also takes stock of the consideration of environmental and social aspects throughout the implementation of the project or program. It is therefore a moment of final verification of the application of environmental and social management strategies and measures, but also of the environmental and social impacts that the project or program will have caused. It is in this stage that the links between the project or program can be established, the modifications induced by its implementation on the components of the physical, biological and human environments and their impacts with regard to specific issues.

### **III.5 Development of the Environmental and Social Impact Management Plan**

#### **III.5.1 Definition of the Environmental and Social Impact Management Plan**

The ESIMP is a management framework of an activity for the effective and efficient implementation of measures to manage environmental and social impacts. It presents, for each negative environmental and social impact, the measures required to prevent, minimize, mitigate or compensate for the negative environmental and social impacts (estimated costs); and for each positive environmental impact, the growth measures. It consists in enforcing the environmental commitments of the project. The development of the ESIMP allows environmental and social issues to be firmly and deeply incorporated into all project and program activities. Similarly, it presents the monitoring and follow up framework, the institutional arrangements to be made during the execution of the project.

### III.5.2 Mitigation measures for negative impacts

After the analysis of negative impacts, mitigation measures are then taken, these measures must be realistic and achievable. This is why the BOPE is dedicated to defining these measures using a participatory approach, with the involvement of the communities and the active and decisive collaboration of the technical services and other public institutions concerned.

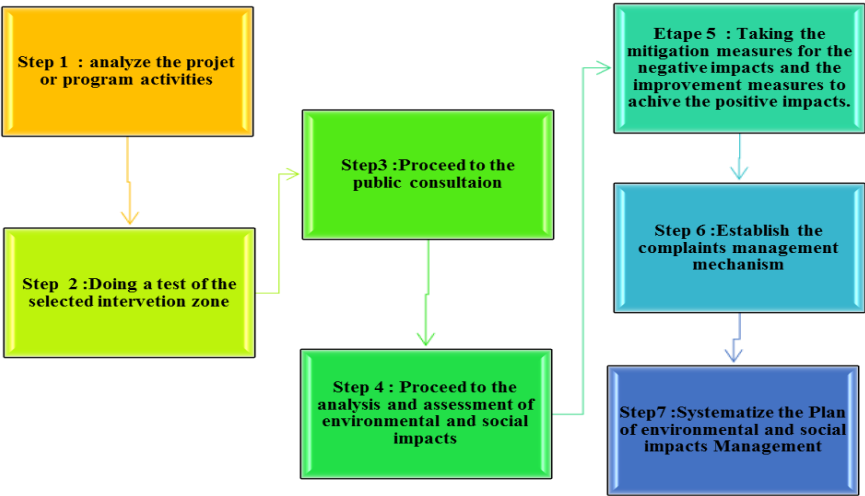
**Table 4: Example of some mitigation measures for the impacts of the Agricultural Transformation Project in East and Central Africa (ATPECA): Burundian component**

Activities	Negative Impacts	Mitigation Measures
Livingstock	Degradation of plant resources and worsening of erosion caused by overgrazing, clearing and trampling of cattle.	Limit the daily duration of grazing or stabling; popularize the new law on permanent housing and planting of fodder which could also contribute to soil protection;  Limit livestock access to unstable or sloping land and to agricultural plots.
	Competition over land and water resources with other uses, particularly the beans, corn, rice and cassava.	Promote housing, provide passage corridors and drinking troughs outside of agricultural plots; prioritize integrated farming techniques
	Environmental pollution and dangers caused by pest control measures	Implement the action plan for pests and pesticides
Set up an agro-food processing unit	Risks of air pollution by emission of particles from construction activities and the operation of the processing unit.	Regularly moisten the soil during the work phase; Place the processing units in a location outside the built-up areas; surround the units with plantations which dominate the height of the dust outlet; provide workers with protective equipment.
	Risk of noise pollution	Keep the machinery installation a little away

		from homes and provide workers with protective equipment
	Risk of discrimination against certain social groups of workers (Batwa, migrants and people displaced by the internal conflict)	<p>Ensure that all workers, including at-risk social groups, have employment contracts and are informed (in all relevant languages) of their rights, including with regard to their wages, benefits and deductions which can be performed;</p> <p>Establish a grievance mechanism accessible to both permanent and temporary workers. Talk periodically to contract / temporary workers about complaints and opportunities.</p>

**III.5.3 Development of the ESIMP**

After identifying the risks and proposing mitigation measures, developing the Environmental and Social Impact Management Plan is the next step. Thus, each project or program to be implemented, the BOPE will have to develop a **ESIMP**. The **ESIMP** provides a clear dashboard for the operationalization of the environmental and social impact management strategy. Its development follows a seven-step process, shown below.



**Figure 4: Process for developing an Environmental and Social Impact Management Plan**

### **III.5.3.1 Step 1: Analyze project or program activities**

The first step in developing a ESIMP concerns the analysis of the activities of the project or program concerned. During this phase, each activity is carefully scrutinized to study its likely impact on the environment and on communities. It is therefore appropriate, during this phase, in a participatory manner, with the involvement of communities and other stakeholders, to study the activities, for each component of the project or program concerned, in order to see their likely impacts.

### **III.5.3.2 Step 2: Examine the selected intervention area**

The second stage in the realization of the **ESIMP** corresponds to the examination of the physical environment to receive the project concerned. During this phase, we are dedicated to mobilizing technical services, communities, but also experts and the company responsible for carrying out the work (specifically for construction or development projects). The observation of the implantation area is done in this logic, considering several aspects (socioeconomic, physical, biological, etc.). It allows you to see:

- The overall characteristics of the environment;
- The physical environment;
- The biological environment;
- Wildlife ;
- The flora ;
- The human environment;
- Human settlements;
- The sensitivity of the environment in relation to the project to be implemented;
- The likely repercussions because the implementation of the project, etc.

Finally, it makes it possible to see and appreciate the vulnerability of the communities living in the impact zone and the zone of influence of the project or program concerned.

### **III.5.3.3 Step 3: Conduct a public consultation**

The participatory approach of the BOPE is also shown in this stage, with the active involvement of the communities benefiting from its interventions. In this perspective, public consultation activities make it possible to ensure the appropriation of projects and programs by these communities, but also the availability of all the information necessary for a good work of framing and evaluation. In the Environmental

and Social Impact Study, we consult the communities, but also the technical services, to inform about the project, to share on the probable and potential impacts, to share on the mitigation measures, but also to collect recommendations and impressions of stakeholders.

#### **III.5.3.4 Step 4: Analyze and Assess the environmental and social impacts**

During this stage, all the impacts and mitigation measures recommended by these actors are noted, analyzed, and the feasibility of the measures studied. With the results of the previous steps, the analysis and evaluation of the environmental and social impacts are done. This helps to identify and inventory potential impacts, but also to assess the probability of occurrence and the severity of each likely impact. From these actions, a good characterization of each potential impact could emerge, thus facilitating the taking of mitigation and improvement measures.

#### **III.5.3.5 Step 5: Take mitigation measures (for negative impacts) and improvement measures (for positive impacts)**

This is the phase of taking action to correct the negative impacts and consolidate the positive impacts. Technical services, communities and experts are the main actors involved in this phase. They will thus ensure that for each negative impact highlighted, one or more mitigation measures are taken, and for each positive impact noted, consolidation actions are recommended.

#### **III.5.3.6 Step 6: Establish a complaint management mechanism**

To better detect and take care of negative environmental and social impacts, the sixth step corresponds to the establishment of a mechanism for receiving, managing and processing environmental and social complaints.

The information of the populations on the mechanism can be done through the establishment of a register of grievances near the local authorities or delegates of concerned districts. Likewise, the project concerned informs the population about the procedure to follow in order to be able to complain.

Generally, at the level of each province, commune or hill concerned by the activities of the project, a register of complaints is permanently available to the public. These institutions receive all complaints and claims related to the works, analyze the facts and rule at the same time and ensure that the works are carried out by the project in the locality.



Information of the public on the permanence of the collections in this notebook is undertaken, in particular by the actors, in connection with the authorities concerned. The complaints are dealt with first at the level of the committees set up. In case of disagreement, the problem is submitted to the level of the Administrative Authority. This remedy is to be encouraged and strongly supported.

### **III.5.3.7 Step 7: Systematize the Environmental and Social Impact Management Plan**

The development of the ESIMP can finally be done. The ESIMP thus presents contingency or mitigation measures for the negative impacts noted, and consolidation measures for the positive impacts. It also presents the costs associated with its implementation, but also the methods of implementation and monitoring, the actors involved, and a detailed schedule.

In general, an Environmental and Social Impact Management Plan presents, for a project or program, the following elements:

- Likely environmental and social impacts and mitigation measures;
- Likely positive environmental and social impacts and consolidation measures;
- Action monitoring schedule;
- Monitoring indicators;
- The methods and plan for monitoring mitigation actions;
- The early warning system for possible impacts not taken into account;
- The stakeholders involved in the implementation and their roles;
- The costs of implementation;
- The reporting system.

## **CONCLUSION**

Since sustainable development is the reason of the Burundian Office for the Protection of the Environment (BOPE), the management of the environmental and social impacts of its projects and programs is an obligation. As impacts can be multifaceted, the method of managing impacts cannot be standardized. It must adapt to the realities of projects and programs and their activities. Thus, the methodology can vary from one project to another, from one program to another, from one activity to another, depending on the evolution of the context, the nature of the problem and the environmental and social impacts. possible and probable. However, the manual gives the frames of reference, the institutional framework, the methodology for the development of the Environmental and Social framework Management for each project and program of the Office.

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## APPENDICES

### Appendix 1: Summary of the negative social impacts of the rehabilitation activities of production infrastructures of multi sectorial project about infrastructures of Water and Mine

	Phase	Negative Social Impacts
Rehabilitation of dams and hydroelectric power stations	Construction (Works)	<ul style="list-style-type: none"> <li>▪ Annoyances related to noise, odors, vibrations, fumes, dust</li> <li>▪ Worker safety: work accidents</li> </ul>
	Exploitation	<ul style="list-style-type: none"> <li>▪ Risks of water-related diseases such as malaria, bilharziasis and worms</li> <li>▪ Risks for workers' health, illnesses, housing, water supply</li> <li>▪ Deterioration of water and retention due to nutrients contained in eroded soils and possibly chemical fertilizers.</li> </ul>
Developping the hydroelectric power stations Kabu 16	Construction	<ul style="list-style-type: none"> <li>▪ Erosion and damage to the landscape by borrowing construction materials for the dam.</li> <li>▪ Soil and vegetation degradation during constructions</li> <li>▪ Soil contamination by construction material waste (cement, paint, machine oils).</li> <li>▪ Potential risks for the health and safety of workers and residents:</li> <li>▪ Risks related to the extraction of materials (mine blasting, transport)</li> <li>▪ Unpleasantness related to noise, odors, vibrations, fumes, dust, explosion traffic</li> <li>▪ Worker safety.</li> <li>▪ Risks of water-related diseases such as malaria, bilharziasis and worms</li> <li>▪ Risks for workers' health, illnesses, housing, water supply.</li> <li>▪ work accidents</li> </ul>
	Exploitation	<ul style="list-style-type: none"> <li>▪ Loss of productive land (agricultural, pasture)</li> <li>▪ Displacement of people and families and resettlement</li> <li>▪ Loss of livelihood and proximity:</li> <li>▪ Mineral resources submersion (gold plate)</li> <li>▪ Submersion of other resources, notably agricultural ones</li> </ul>

		<ul style="list-style-type: none"> <li>▪ Effects on underground hydrology</li> <li>▪ Erosion in the watershed and sedimentation in the reservoir</li> <li>▪ Creation of breeding grounds for carriers of diseases such as mosquitoes and snails.</li> <li>▪ Increase in water-borne diseases such as malaria, schistosomiasis (bilharzia, onchocerciasis: river blindness, dysentery, fevers, etc.)</li> <li>▪ Reduction or alteration of flow rates in quantity and quality of water flowing downstream.</li> <li>▪ Modification of the location of the beds and banks as well as their erosion and sedimentation rate downstream.</li> <li>▪ Stability of the banks of the reservoirs.</li> <li>▪ Reduction in fish production, reduction in the number and quality of aquatic habitats</li> <li>▪ Risk of eutrophication of reservoirs:</li> <li>▪ Deterioration of the reservoir water due to the decomposition of the flooded vegetation</li> <li>▪ Deterioration of water and retention due to nutrients contained in eroded soils and possibly chemical fertilizers</li> </ul>
Rehabilitation of water and pumping stations production factories	Construction (works)	<ul style="list-style-type: none"> <li>▪ Risk of accidents</li> <li>▪ Risks of contamination by pouring out oil, fuel and other and several kinds of lubricants.</li> <li>▪ Soil and water contamination by waste materials and chemicals</li> <li>▪ Limitation of access to water due to the non-functionality of the networks during the works.</li> <li>▪ Air pollution by gas emissions</li> <li>▪ Discomfort and nuisance for riparian residents</li> </ul>
	Exploitation	<ul style="list-style-type: none"> <li>▪ Pollution risks because of the accumulation of waste materials used.</li> <li>▪ Risk of water contamination following landslides damaging the catchment infrastructure (supply lines) and causing heavy loads of suspended matter in the water.</li> <li>▪ Risk of accidents for divers responsible for cleaning and maintaining the installations in the lake.</li> </ul>

**Appendix2: Summary of the negative social impacts of the rehabilitation activities of production infrastructures of multi sectorial project about infrastructures of Water and Mine.**

	<b>Phase</b>	<b>Negative environmental impacts</b>
Rehabilitation of dams and hydroelectric power stations	Construction (works)	<ul style="list-style-type: none"> <li>▪ Potential pollution by greenhouse gases</li> <li>▪ Pollution by waste resulting from emptying works and potential cleaning of reservoirs.</li> <li>▪ Pollution by solid waste resulting from equipment overhaul and repair work.</li> <li>▪ Potential contamination of soil and water by waste materials used: oil, fuel, etc.</li> </ul>
	Exploitation	<ul style="list-style-type: none"> <li>▪ Air pollution by greenhouse gas emissions.</li> <li>▪ Risk of water pollution by waste left after construction work.</li> <li>▪ Pollution and nuisance of the site and the surrounding environment.</li> <li>▪ Risk of water contamination</li> </ul>
Developing the hydroelectric power station Kabu 16	Construction	<ul style="list-style-type: none"> <li>▪ Generation of huge quantities of solid waste (spoil, demolition, etc.)</li> <li>▪ Environmental pollution by solid and liquid discharges from the site.</li> <li>▪ Land clearing and / or deforestation in the event of the opening of quarries</li> <li>▪ Air pollution by dust and gaseous emissions</li> <li>▪ Accidental release of hydrocarbons, oils, greases, and hinges at the place of the equipment park and the asphalted stations</li> <li>▪ Releases of pollutants</li> <li>▪ Spoiling of the landscape by embankments, deep cuts, embankment works and quarries.</li> </ul>
	Exploitation	<ul style="list-style-type: none"> <li>▪ Risks of sedimentation of rivers, landslides and subsidence of land</li> <li>▪ Air pollution by vehicle emissions</li> <li>▪ Soils Waterproofing</li> </ul>

### Appendix 3: Screening Form

#### SCREENING FORM

This screening sheet is designed to assist the promoter and the competent authority in determining whether an environmental and social impact study is necessary. The decision is based on the characteristics of the project and its environment.

Project title.....

Person in charge of the project (person contacted)

First and last name .....

Function: .....

Address .....

Telephone: ..... E-mail: .....

#### Project classification

Based on the information below the project is classified as follows (check an option):

- The project is listed in Annex I to Decree no .....So it is subject to the environmental and social impact study procedure.
- The project is listed in Annex II to Decree no... .. Considering the analysis below, the project is likely to have environmental and social impact.
- The project appears on appendix II of Decree no... .. Considering the analysis below the project is not likely to cause significant environmental impact, it is not subject to the study procedure of environmental and social impact.
- The project does not appear on one of the Annexes to Decree no ..... .. Therefore it is not subject to the social environmental impact study procedure.

#### Project description

Brief description of the project (such as location, size / extent / area, capacities, facilities and services, (pre) construction, operation and / or resuscitation activities, budget) -max.10 lines

.....  
.....  
.....  
.....  
.....

Project location (province, Commune, Hill, sub-Hill, address (if applicable) and geographic coordinates):

.....  
.....

The project is under which activity (ies) listed in appendices I and II of Decree no.... ? List the applicable codes (e.g. I.1.9 and I1.10)



Screening for projects listed in Annex I or II

Using the information available on the subject answers each question in column 2:

- Yes - if the answer is affirmative
- No -if answer is negative
- ? -If we don't know the answer

Explain the answer in column 3. Describes the potential impacts of the project in relation to their scope, probability, duration, frequency, reversibility, transfromial nature, etc.

Project Impacts	Yes/ No/?	Provide arguments
<b>1. Natural Resources</b>		
This can cause the qualitative and /or quantitative diminution of natural resources (water, woods, underground resources,soil,quarry, landslide etc)		
This can affect the risky zones geologically or soils that are likely to undergo severe degradations(runoff, landslide,earthquake,etc)		
Other impacts in this category and summary ..... .....		
<b>2. Biodiversity and Nature</b>		
This can affect the rare ,important and or important spicies economically, ecologically or culturally		
This can contribute to the introduction and/or widespread of overrunning species		
This can affect the sensible zones such as : forests(classified),humid zones ,lakes, rivers, seasonal floods zones , national parks, (for example for interference with crow fly,with migrations of mammals, etc)		
Other impacts in this category and summary: ..... .....		
<b>3. Scope land and historical and cultural values</b>		
There will be the sad impact on the esthetic value of landscape.		
This can change the historical , archeological, religious, cultural or tourist sites(by excavations, nuisance,etc or green spaces)		
Other impacts in this category and summary: ..... .....		
<b>4. Loss of Assets, Estates and Services</b>		
This can cause the passing or deep economic crisis of... For example cultures, agricultural lands ,overgrazing, trees, equipments (granaries, sea walls, etc)		
<b>Other impacts in this category and summary:</b>		

<b>5. Pollution and Nuisance</b>		
This can cause the high level of noise, atmospheric ,olfactive, water, soil pollution, etc		
This will generate industrial solid and liquid wastes(dangerous and/or dangerous) and /or domestic		
It is installed in the polluted zone.		
Other impacts in this category and summary: ..... .....		
<b>6. Social inequalities</b>		
It can have the negative effects on for example social groups, agricultural traditional systems or practices.		
This can cause people to unwillingly move		
Other impacts in this category and summary: ..... .....		
<b>7. Health and Security</b>		
The Project can cause the accidents(explosion, fire, toxic emission, etc)		
This can cause the negative impacts on the public health.		
Other impacts in this category and summary: ..... ..... .....		
<b>8. Climate Change</b>		
It contributes to the climate change (many emissions of the greenhouse gas) or can be affected by that change.		
Summary: ..... .....		

The person in charge of filling in this form  
Names : .....  
Fonction : .....  
Adresse : .....  
Telephone : .....E-mail : .....  
Date : .....Signature : .....

**[The form to be filled in by the competent authority]**

Decision of the competent authority on the preliminary sort out of the project entitled:

.....

Conclusion

Based on the project's information and its environment it is decided that:

- The project should be submitted according to the procedure of the environmental and social impact study whose the following step is the TORs development which will be published.
- The project is not submitted according to the procedure of the environmental and social impact study

Justification of the conclusion

.....  
.....  
.....  
.....

Competent Authority's contact

Names : .....

Telephone : ..... E-mail : .....

Date....

Stamp

At...

By...

Signature

## Appendix 4: Standard terms of reference for ESIS

### REPUBLIC OF BURUNDI



**MINISTRY OF WATER, ENVIRONMENT,  
OF COUNTRY AND TOWN PLANNING  
DEPARTMENT OF ENVIRONMENT  
TEL NUMBER: 22241368**

### **Fixed Terms of reference for the environmental and Social Impact Study in Burundi**

**= to be adapted for =**

#### **Procedure**

- The ToRs are the result of the framework. The scoping process serves to limit the fields of the Environmental and Social Impact Assessment.
- The promoter is based on fixed ToRs proposed by the environmental administration, which constitute a framework. They are provided below.
- After consultation with the public and other stakeholders, the promoter prepares a draft specific ToR for his investment project.
- The environmental administration approves and fixes the ToRs proposed by the promoter.
- Then, the promoter presents his ESIS report conform to the structure of the approved ToRs

#### **1. Non-technical summary**

This summary is part of the ESIS report, it will mainly be read by policy makers and stakeholders, and therefore it is worth paying special attention to. The summary should be readable as a separate document, in non-technical language, and should clearly reflect the content of the report. It should include the most important aspects of the ESIS, such as:

- The project and the alternatives;
- The main environmental impacts of the planned project and the alternatives, uncertainties and gaps in information;
- The main elements of the ESIMP.

## **2.Introduction**

In this chapter, give:

- The purpose of the terms of reference:
- The promoter's presentation
- The title and category of the project (according to annexes I and II of the decree):
- The Minister responsible;
- The award procedures for carrying out the ESIS (invitation to tender, consultation, private agreement, etc.).

## **3.Background**

In order to better understand the context of the proposed project, provide:

- The legal framework (conventions, laws, policies, strategies, programs, plans, etc.) and its relevance to the project;
- The institutional framework.

## **4. Description of the project and alternatives**

a. Specify the constituent elements of the project. and its alternatives, among others:

- Location;
- Overall plan:
- Size / extent / area
- Capacities;
- Pre-construction, construction, operation and rehabilitation activities:
- Calendar.
- Necessary staff:
- Facilities and services:
- Operating and maintenance activities:
- Necessary off-site investments and lifespan
- Project budget.

b. **Justify the choice of the project and its constituent elements.**

## **5.Analysis of the initial state**

The purpose of this analysis is to describe the initial state and to report the current damage in the area of influence of the project. To this end, justify the choice (inclusion or exclusion) of the characteristics to be developed in the ESIS and identify and justify the methods used to describe these characteristics

Consider the following characteristic methods:

- Methods
- Use existing information:
- Comparison with a similar project;
- Collect / measure missing data:
- Expert judgment.

**Characteristics of the natural environment):**

**Physical environment:** geology, relief, soils, climate and meteorology, existing sources, atmospheric emissions, quantities and qualities of pollutant in water. Ambient air. Hydrology of surface and groundwater. etc .;

**Biological environment:** flora, fauna, rare or endangered species: sensitive habitats such as marshes and including parks or reserves and important natural sites species of commercial importance and that likely to be a nuisance factor, vectors of dangerous diseases ... etc.

**. Characteristics of the human socio-economic environment:**

Land ownership demography, land use including existing infrastructure. Community structure development activities (employment, source and distribution of income, goods and services, leisure, public health, cultural heritage. Gender equality, vulnerable groups. Customs. Aspirations and attitudes ...) etc.

**6. Analysis of an environmental revolution without a project**

Develop an inventory of other activities (in progress or approved ") in the project area, for the scheduled time of project completion. This inventory serves to signal the influence of these activities on the influence of the project and consequently, on the design of the project.

**7. Impacts of the project**

In order to know their importance, identify, analyze and evaluate the possible impacts of the implementation of the project on the physical, biological environment. Socio-economic and human. To this end, draw up a long list of possible impacts of the project. After analysis, field visit and stakeholder consultation. Identify the main impacts to expect. In the ESIS, analyze and assess in detail the main impacts. This focus on the main impacts makes the ToRs specific to the project.

Quantify the costs / economic value of the main impacts identified for this project.

Impact categories to consider. for example:

- Positive and negative impacts:
- Spatial impacts (direct and indirect):
- Impacts as a function of time (immediate, short and long term, temporary and permanent):
- Cumulative impacts:
- Residual impacts:
- Socio-economic impacts:
- Impacts on gender equality; etc.

**8. Identification of measures**

- To avoid, reduce or eliminate negative impacts at acceptable levels. Propose and justify the mitigation measures for the project (and each of the alternatives evaluated where appropriate):
- Estimate the scope (including activities) and costs of CCS measures:
- Offer compensation to parties affected by impacts that cannot be mitigated:
- As well as compensation for residual impacts: etc.

**9. Management plan**

Enabling the application of mitigation measures, developing an environmental and social management plan (ESMP) including:

- The measures and their activities proposed,
- Institutional arrangements including technical and human capacity needs;
- Their costs;

- The calendar for their implementation
- Mechanisms and indicators for monitoring and surveillance of the project and its environment.
- As well as the compensation plan for the people and communities affected by the project if applicable: etc.
- A summary which is presented in the form of a table.

#### **10. Terms of reference**

Include the approved Terms of Reference in the ESIS report.

#### **11. Summary of public consultations**

Include:

- The list of consulted stakeholders, such as administrative. Residents, non-governmental organizations. local, other stakeholders and groups concerned;
- The methods used to inform and consult stakeholders, such as meetings, press releases, observations and surveys in order to obtain stakeholder comments on the impacts of the project and the proposed mitigation and compensation measures:
- The results of the public consultation, particularly in terms of the main impacts selected (see above). as well as the justification for the use of its results

#### **12. Gaps**

Identify and justify the gaps in environmental information provided the report must indicate the environmental aspects which cannot provide sufficient information due to a lack of data orient it on environmental aspects which play an important role in the subsequent decision-making process so that we can assess the consequences of this deficit. Also indicate the possibilities to remedy these shortcomings.

#### **13. Presentation**

Particular attention should be paid to the presentation of the ESIS results. Present the report using tables, photos, figures and maps.

Ensure:

- Include in the appendix an explanatory list of terms and abbreviations;
- Specify any useful source of information in the / one (reference documents on the state of the environment.
- Use the material of recent and legible cards with clear keys.