

NBI Technical Reports: Wetlands and Biodiversity Series Burundi Wetlands Governance and Management Profile

## WRM/WBS-2022-15



On behalf of:



Federal Ministry for the Environment, Nature Conservation and Nuclear Safety

of the Federal Republic of Germany

#### **Document Sheet**

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#### **1. ABOUT BURUNDI**

Burundi is a landlocked country in Central Africa between its neighbors, belonging to East Africa with an area of 27834 km<sup>2</sup>, much of which is in the Nile basin and the other part is in the Congo Basin. The country is bordered on the north by Rwanda, on the east by Tanzania and on the west by DR Congo. It is a predominantly agricultural country, with an average density of 300 inhabitants per km<sup>2</sup> and rapid population growth (2.6% in 2010), especially in rural areas where over 90% of the population.

The country has a diverse landscape with 5 agro-ecological regions from West to East by (i) the Imbo plain, (ii) the Congo-Nile Ridge, (iii) the central plateau, (iv) the KUMOSO depression and the Bugesera Depression in the north. The altitude varies from 780 m at the Tanganyika lake at 2700 m to the summit of Mont Heha on the Congo-Nile ridge.

The geographical position of Burundi located in the heart of Africa and enjoying a temperate equatorial climate, part of the Albertine Rift, home to Mount Heha, Rusizi River, Lake Tanganyika make this country a wonderful tourist destination towards Africa.

According to the General Census of Population and Housing, the country had a population of **8,053574** inhabitants in 2008 (ISTEEBU, 2008). This Burundian population will continue to grow at a steady pace, from 8 053 574 inhabitants in 2008 to **9,823828** inhabitants in 2015 with a density of **379hab / Km<sup>2</sup>**, and at **13,375501** in 2030, an increase of **66.08% in 22 years.** 

Agriculture is the most important sector of the Burundian economy and employs a large proportion of the workforce. Major agricultural products include coffee, tea, cotton as an export crop, cassava, potatoes, legumes, oilseeds, bananas, rice, etc. as a food crop. Burundi is practicing the breeding of cattle and small ruminants as well as poultry without forgetting fishing.

The country has a small industrial sector mainly focused on sugar processing (SOSUMO), brewing and soft drinks (BRARUDI), cotton textile manufacturing (AFRITEXTILE) and cement production(BUCECO).

#### 2. WETLAND OF BURUNDI

Wetlands may simply be defined as swamp systems, alluvial plains, peat lands, or natural or man-made, permanent or temporary, stagnant or common, soft, brackish, or saline, where water is the primary controlling factor the natural environment and associated animal or plant life.

#### 2.1 National wetlands

The main wetland systems related to rivers and lakes are distributed s into 4 categories namely (i) Wetlands associated with Maragarazi and its tributaries with 33959.9ha and represents 27.5%, (ii) Wetlands associated with Ruvubu and its tributaries with 32262.9 ha and represents 26.1%, (iii) Wetlands associated with Akagera-Kanyaru, their tributaries and northern lakes a with an area of 20326.4 ha and represents 16.4%, (iv) Wetlands associated with Lake Tanganyika and its tributaries with an area of 36682.3 ha and represents 29.7%, for a total of 123,231 ha (1,232, 31 km<sup>2</sup>)<sup>1</sup> (*National Plan for the Strategic Management of Wetlands in Burundi, December 2017*).

In terms of hydrology, Burundi's wetlands are located in watersheds of 4 Great Rivers and lakes to know:

#### 1. Lake Tanganyika Basin and Rusizi River in the West :

In this area, the water flow into Lake Tanganyika and has extensive wetlands that drain the waters of the River Rusizi or we find the Rusizi National Park area 10,600 ha which is located the Rusizi Ramsar site.



Hippopotamus in the Lake Tanganyika

<sup>&</sup>lt;sup>1</sup> National Plan for the Strategic Management of Wetlands in Burundi, December 2017

- Akagera Basin including the Cohoha and Rweru lakes in the north of the country : this zone drain the waters of the Akagera basin and include in the Burundian part a complex of several lakes, the main ones are the lakes Cohoha and Rweru. This wetland called "Northern Protected Waterscape Was designated as a Ramsar site in 2013 and covers an area of approximately 16,000 ha.
- *3. Ruvubu River Basin in the center:* This basin is mainly located in the center of the country, furrowed by several rivers, the waters of this basin flow into the river Ak agera. It is in this basin that is located the Ruvubu National Park of about 50,000ha, designated in 2013 as Ramsar site of international importance.



4. *Malagarazi River basin in the East:* This basin is located in the east of the country and drains the waters of this sub-basin in the Malagazi in which we have the Malagarazi Reserve with an area of 800 ha, designated in 2013 as a Ramsar site.



Surface waters include all of the country's rivers and lakes. The table below presents the water resources available per watershed based on the essential characteristics of surface waters : average flow, base flow and guaranteed annual flow.

Primary watersheds	Secondary watersheds	Tertiary drainage basins	Area (mainland) (km <sup>2</sup> )	Volume annual ( 10 <sup>6</sup> m <sup>3</sup> )
Congo	TANGANYIKA	RUSIZI	2684	1672
		Lake TANGANYIKA	3871	2,450
	Malagarazi	Malagarazi	5262	1607
		Subtotal	11817	5729
Nile	Ruvubu	Ruvubu	10,063	3,420
	KAGERA	Kanyaru	1.938	655
		KAGERA	1217	257

Table Showing Available Water Resources per Watershed

#### 2.2 Transboundary wetlands of Burundi

#### 2.2.1 Major Transboundary wetland systems

There are three main transboundary wetland systems. These are:

Wetland of Lake Tanganyika and Rusizi River in the West : This wetland system is located in the border area between the DR Congo and Burundi and mainly includes the Lake Tanganyika wetland and the Rusizi National Park.

This wetland system faces major degradation problems related to population pressure, urbanization and overfishing. The impacts linked to this demographic pressure are the biodiversity loss of Lake Tanganyika, loss of habitat for biodiversity (hippos, fish, etc.) and water pollution of Lake Tanganyika.

Kagera wetland including the Cohoha and Rweru lakes in the north of the country: This wetland system is located in the border area between Rwanda and Burundi and comprises mainly the Northern Protected Waterscape in which Lakes

Rweru and Cohoha are located. This area is facing drought problems in recent times as a result of climate change, which negatively affects food security.

This area traditionally attracts tourists with the seasonal presence of migratory birds.

Malagarazi wetlands in the east of the country : This wetland system is located in the border area between Tanzania and Burundi.

#### 2.2.2 Ecosystem services through transboundary wetlands

Transboundary wetlands are of immense value for the livelihoods of local communities and the development of the country as a whole. The main products and services they provide are:

- *(i) Drinking water supply*: Transboundary wetlands such as Lake Tanganyika provide drinking water for the city of Bujumbura,
- (*ii*) Regulation of the hydrological system, control of floods, fights water pollution.
- (iii) Tourism values: The three transboundary wetlands can be used for tourism purposes.
- *(iv) Habitat for biodiversity:* The three transboundary wetlands provide habitat for terrestrial and aquatic biodiversity.

National wetlands perform similar functions and have values similar to those of transboundary wetlands.

#### 3. POLICY AND LEGAL FRAMEWORK

#### **3.1 Policy Framework**

A number of documents policies guide conservation and the management of wetlands in Burundi. The main ones are listed below.

#### 3.3.1 The National Strategy for the Environment in Burundi « SNEB» (1997)

This document makes a diagnosis by providing the basic data as well as the environmental transforming factors. It gives an inventory of the resources and the environment as well as an overview by geographical area. This Strategy shows that natural resources are in decline and particularly wetland ecosystems that provide ecological values and functions who contribute to the health and development of the country socio-economic. Nevertheless, wetlands are not highlighted for their importance in the life of a nation.

#### 3.3.2 National Water Policy (2009)

This policy document shows the current situation of water resources and is structured around six chapters, namely:

- 1) The physical, human, economic, legal and institutional environment.
- 2) Framework for the development of the National Water Policy by referring to international instruments and conventions as : The Nile Basin Initiative (NBI), the Lake Tanganyika Management Agreement, the Economic Community of Central African States (ECCAS), the Council of African Ministers of Water (AMCOW), the New Partnership for Development in Africa (NEPAD), the Ramsar Convention on Wetlands, the United Nations Convention on Climate Change, etc.
- 3) Potential and use of water.
- 4) Problem of water resources management.
- 5) Vision, Principles and objectives of water policy.
- 6) The Strategic Orientations of the National Water Policy on seven (7) axes :

Axis 1 : Favorable environment for good governance of the water sector.

Axis 2 : Integrated Water Resources Management (IWRM).

Axis 3 : Drinking Water and Basic Sanitation.

Axis 4 : Water for socio-economic development and the environment and waterrelated disaster management. Axis 5 : Transboundary dimension of Burundi resource management.

Axis 6: Planning and Financing of the water sector.

Axis 7 : Strengthening professional capacities in the field of water.

#### 3.3.3 National Strategy and Biodiversity Action Plan 2013-2020

This second generation National Strategy and Action Plan on Biodiversity (SNPAB) document was prepared as part of the project "Review of the National Strategy and Action Plan on Biological Diversity and Development of the 5 <sup>the</sup> National Report" to the Convention on Biological Diversity ":

- 1. The general presentation of Burundi,
- 2. State of play of biodiversity,
  - Flora and fauna of Burundi,
  - State and trend of ecosystems,
  - Services provided by ecosystems and their contribution to human well-being,
  - Causes and consequences of biodiversity degradation,
  - Biodiversity management,
- 3. Strategy and Action Plan.

Vision of the strategy and guiding principles :

" By 2030, biodiversity is restored, conserved and used rationally by all actors, ensuring the maintenance of ecosystem services and ensuring essential benefits for current and future generations ".

To operationalize this vision, Burundi adopts the following guiding principles:

- i. The country's natural ecosystems and biological resources must be considered as economic, socio-cultural and ecological functions must be maintained;
- ii. Biodiversity conservation should be participatory and based on a partnership between different stakeholders, particularly local and indigenous communities;
- iii. Traditional knowledge of biological resources and traditional and sociocultural practices and values in species conservation need to be protected and valued;
- iv. The exploitation of agroecosystems must be done in such a way as to guarantee an ecological balance with the natural ecosystems;
- v. The establishment of coordination structures for biodiversity conservation actions must be supported;

- vi. The development of a law specific to biodiversity and its effective application is an imperative for the conservation and sustainable use of biodiversity;
- vii. Capacity-building at all levels for all stakeholders in biodiversity management and conservation needs to be widely promoted ;
- viii. The protection of transboundary ecosystems and the promotion of regional tourism must be in line with the regional integration of biodiversity;
- ix. The establishment of procedures for access to genetic resources must be done in such a way as to ensure a fair and equitable sharing of the benefits derived from them;
- x. National policies, strategies, and national and sectoral programs must integrate biodiversity-related issues whose values need to be reflected in national accounts.

#### 3.3.4 Vision " Burundi 2025 "

The Vision document "*Burundi 2025*" highlights several factors that are at the origin of the destruction of its environment and the degradation of biodiversity and considers a certain number of solutions including a good spatial planning and a rational urbanization, a management efficiency of land problems, the restoration of ecosystems through intensive reforestation, the protection of fauna and flora, a better exploitation of energy resources, a controlled management of water, the restoration of ecosystems through reforestation, public and public awareness of environmental issues. It also advocates that the environment in general be integrated into all socio-economic policies as an essential component of sustainable development.

#### 3.3.5 National Forest Policy

The purpose of forest policy is to perpetuate existing forest resources and develop new resources to ensure the socio-economic and ecological functions of present and future populations. Four general objectives underpin this policy are to plan the development of the forest sector to meet the needs of the people and the country while sustaining the resource, developing and managing forest resources rationally, enhancing forest resources and building human capacity and institutional. Through these objectives, the Forest Policy provides several orientations that aim at the preservation and sustainable use of forest resources:

- Mitigation of human pressure on forest resources;
- Reforestation in blocks of all available spaces and likely to be;

- Improved knowledge of forest resources;
- Promotion of agroforestry, urban forestry and trees outside forests;
- Promotion of participatory forest management;
- Promotion of efficient wood processing techniques and / or its derivatives.

#### 3.3. 6 Burundi National Development Plan (NDP) (2018-2027)

# Sustainable management of the environment, natural resources, climate change and spatial planning

Sustainable management of the environment is one of the pillars of the foundation for sustainable economic development growth.

#### $SO^21$ : Preserving and restoring ecosystems, and combating desertification

This goal is to achieve better preservation and restoration of existing ecosystems to prevent desertification of high vulnerability areas linked to climate change.

At the level of this strategic objective, several actions are recommended in the next ten years to implement programs that will achieve the expected results. These include: (i) the management of natural resources, the environment through the management and restoration of Burundian landscapes, (ii) Forest Wealth Management, Protected Areas and Biodiversity, (iii) the environmentally sound management of chemicals.

# SO2 : Provide sufficient quantity and quality of water for efficient and equitable use without compromising the environment

To accelerate progress and improve the water supply and sanitation situation, the following programs will be undertaken: (i) Promotion of the rational management of water resources throughout the water cycle, (ii) Promotion of rainwater management and development.

#### SO3 Promoting the fight against pollution and environmental sanitation

The current situation in Burundi regarding sanitation is unsatisfactory: the rate of access to improved sanitation is low, pollution related to poor sanitation are numerous. The project of the National Development Plan (PND) aims at a State where the use of adequate sanitation

devices allows the protection of the living environment and natural resources and the sustainable improvement of the living environment of the populations.

#### 3.2 Legal framework

#### 3.2.1 The Environment Code of the Republic of Burundi (June 2000)

This Code lays down the basic rules to enable the management of the environment and the protection of the environment against all forms of degradation, in order to safeguard and enhance the rational exploitation of natural resources, to combat the different forms pollution and nuisances and thus improve the living conditions of the human person, while respecting the equilibrium of ecosystems (*Article 1*).

Where developments, works or facilities are likely, due to their size, the nature of the activities carried out therein or their impact on the natural environment, to harm the environment, the project owner will establish and submit to the Administration of the Environment an impact study to assess the direct or indirect impact of the project on the ecological balance, the environment and the quality of life of the population and the impact on the protection of the environment in general (*Article 22*).

Without prejudice to other requirements that may be formulated by the administration, the impact assessment must include the following sections (*Article 23*):

- Analysis of the initial state of the site and its environment;
- Evaluation of the foreseeable consequences of the implementation of the project on the site and its natural and human environment;
- the statement and description of the measures proposed by the petitioner to eliminate, reduce and, if possible, offset the damaging consequences of the project on the environment and the estimation of the corresponding expenditure;
- The presentation of other possible alternatives and the reasons why, from the point of view of the protection of the environment, the presented version of the project was favored.

#### 3.2. 2 Water Code (2013)

With regard to the water code in **Article 5**, **Chapter I** precise that : are part of the public hydraulic domain (i) springs and streams, natural lakes, ponds and artificial bodies of water,

and (ii) shorelines or shorelines of lakes (150m) one hundred and fifty meters wide for Lake Tanganyika and (50m) fifty meters for the other lakes of the country, a width of (25m) twenty five meters on each side of the rivers tributaries Lake Tanganyika from the highest level reached by the waters in their periodic floods. For other rivers in the interior of the country, a protection zone of (5m) five meters is required.

**Article 50** of the same code states that wetlands must be protected so that they continue to fully play their natural role of renewing water resources.

When considerations of general interest lead to a change in the use of a wetland or aquatic environment, especially for agricultural or industrial purposes, or to carry out an urbanization operation, the authorization procedure must necessarily go through a study of Environmental and Social Impact.

#### 3.2.3 The revised land code (2009)

Without prejudice to the provisions of this Law and the international conventions relating in particular to wetlands and their management, the Code establishes the rules applicable to marshlands for their balanced and sustainable management for the purposes of development and the safeguarding of wetlands environment (*Article 438*).

Part of the public hydraulic domain (i) marshes permanently covered by water, (ii) peat swamps and (iii) marshes classified as protected zones (*Section 442*).

#### 4. INSTITUTIONAL FRAMEWORK

### 4.1 Directorate General for the Environment, Water Resources and Sanitation "DGEREA"

By Decree No. 100/087 of 26 July 2018 on the organization of the Ministry in charge of the Environment, this Department reports to the Ministry of the Environment, Agriculture and Livestock and is responsible in particular for the management of wetlands in Burundi in collaboration with other relevant services.

This direction was created in 2009 and had as objective to implement the National Water Policy (2009) and the National Sanitation Policy (2013) as well as the tools and rules for the management and regulation of the area of the wetland.

The overall objective pursued in this national water policy is to "*Ensure sustainable coverage* of the water needs of all users through the harmonious development of national water resources" and specifically "Protect water resources against any degradation".

The Branch comprises two directions namely:

- $\rightarrow$  The Directorate of Water Resources and Forestry,
- $\rightarrow$  The Department of Sanitation and the Environment

The main missions assigned to this Directorate General include:

- Promote climate change risk management policies in collaboration with IGEBU, OBPE and other relevant services,
- Develop and enforce regulations for the protection and management of the environment,
- ✓ Ensure the implementation of the national water policy and related laws and ensure the protection and conservation of water resources,
- Set up a capacity building program for water and sanitation and the fight against pollution of water resources,
- Participate in the evaluation of environmental impact studies and the monitoring of management plans.
- ✓ In support of the implementation of the Ramsar Convention, support the Administrative Authority and the National Focal Point to coordinate the

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implementation of the Ramsar Convention on Wetlands and other international and regional agreements and protocols on wetlands.

In order to carry out its missions set out above, the General Management in charge of wetland management ensures collaboration with the other departments concerned to await the expected results.

#### 4.2 Burundian Office for the Protection of the Environment "OBPE"

By Decree No. 100/2040 of October 29, 2014, the General Management of OBPE's mission is to

- Ensure compliance with the Water Code, the Forest Code, the Environment Code and other texts related to the protection of the environment
- Enforce environmental standards and propose any safeguarding and nature protection measures,
- ✓ Ensure the implementation of the obligations arising from international conventions and international environmental agreements to which Burundi is a party,
- ✓ Identify and propose new areas to protect and other areas rich in biodiversity requiring special protection measures,

#### 5. CONVENTION AND INTERNATIONAL TREATIES RELATING TO WETLANDS TO WHICH THE COUNTRY IS A SIGNATORY

#### 5.1 The Ramsar Convention

#### 5.1.1 Burundi's participation in the Ramsar Convention

The Convention on Wetlands, known as the *Ramsar Convention* (Ramsar, Iran, 1971), is an intergovernmental treaty that embodies the commitments of its member states to maintain the ecological character of their wetlands of international importance and to plan "*wise use*" or sustainable use of all wetlands in their territory. By acceding to this Convention in 1997, the Government of Burundi pledged to work to support the "**three pillars**" of the Convention:

- Ensure the conservation and wise use of wetlands included in the list of wetlands of international importance.
- As far as possible, include the rational use of all wetlands in national environmental management plans.
- Consult with other Parties on the implementation of the Convention, particularly with regard to transboundary wetlands, shared hydrological systems and shared species.

The Ramsar Convention on Wetlands as Bird Habitat was signed on 2 February 1971 and entered into force in 1975. Burundi ratified this Convention in 2002 and participated in all the Conferences of the Parties which is held every 3 years: COP8 (2002) COP9 (2006) COP10 (2009) COP11 (2012) COP12 (2015).

A total of four Ramsar sites have been designated since the ratification of this Convention.

Ramsar Sites for Burundi	Date Designation	Area (ha)
1) Rusizi National Park	5 <sup>th</sup> November 2002	10673
2) Northern Protected Waterscape	14 <sup>th</sup> March 2013	16242
3) Ruvubu National Park	14 <sup>th</sup> March 2013	50800

Table 1: Table Showing Ramsar Sites by Area and Designation Year in Burundi

4) National Reserve of	14 <sup>th</sup> March 2013	800	
Malagarazi			
ΤΟΤΔΙ		78516	

The Ministry of the Environment, Agriculture and Livestock is the focal point of the Ramsar Convention in Burundi and is represented by the Minister in charge of this sector which is the administrative authority of the Convention and is assisted by a National Focal Point for this Convention.

#### 5.1.2 Ramsar Center for East Africa (RAMCEA)

Burundi is participating in some capacity-building and information-sharing activities under RAMCEA based in Kampala, Uganda. The center serves as a platform for information exchange in five countries of the East African sub region.

#### 5.2 Other international agreements

Other international agreements to which Burundi is a signatory and which are related to the management of wetlands are:

- Agreement on the Conservation of African-Eurasian Migratory Waterbirds or the African-Eurasian Waterbird Agreement (AEWA), entered into force in November 1999;
- Convention on Biological Diversity (CBD), entered into force in December 1993;
- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), entered into force in July 1975;
- Paris Climate Agreement, entered into force in November 2016; and
- United Nations Framework Convention on Climate Change (UNFCCC), entered into force in March 1994.

#### 6. MAIN CHALLENGES AND OPPORTUNITIES

#### 6.1 Main challenges

#### 6.1.1 Destruction of wetlands

The main challenge for wetland management in Burundi is the high rate and fast encroachment, drainage, conversion and destruction of wetlands leading to a reduction in the area covered by wetland.

The demographic pressure associated the demand for food and drinking water, of the lands for the urbanization, of the lands for the parks industrial, the raw materials for the industry the construction, the development of transport infrastructure as well as the accumulation of solid and liquid wastes and many others have resulted in widespread drainage, conversion, degradation, pollution and destruction of wetlands.

The destruction of wetlands affects both national and transboundary wetlands. Most project interventions in countries aim to fight against this threat singular for wetlands.



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#### 6.1.2 Overexploitation

In relation to the challenge above, the studies showed a reduction in various products of wetland ecosystems including water quality and quantity, the reduction of the quantity of fishing products, the cultivation of marsh land as well as exploitation. The excessive use of marshlands for agricultural purposes has led to the drying up of many wetlands.

#### 6.1.3 Erosion of cultural values

The degradation of wetlands has not only hindered their provision and support functions, but has also diminished their cultural functions and aesthetic values. There has also been a significant reduction in the use of wetlands for recreational purposes.

#### 6.1.4 Other challenges

Other important challenges for wetland management are:

- → Financial and human resources for the protection and conservation of wetlands remain low at the national level.
- → Existing policy and legislative instruments are not sufficiently commensurate with the breadth of issues that arise in wetland management.
- $\rightarrow$  A specific law for wetlands is a necessity to fight the rampant degradation and support the efforts of conservation effective.
- $\rightarrow$  The different policies related to wetlands are not harmonized to manage wetlands well.
- → Tools for the sustainable use of wetlands are not available at the national level, in this case the method of total economic valuation of wetland ecosystems ;

#### 6.2 Root causes of problems for wetlands

The main causes of wetland problems are:

- $\rightarrow$  Generalized poverty.
- → Rapid population growth leading to expansion of agriculture and other human activities that degrade the environment.
- → Limited means for choosing the country's development priorities, which results in low budget support for wetland management activities at the central and local levels.
- $\rightarrow$  Low capacity for central and local financial support for wetland management
- → Limited scientific and local knowledge base on wetland management, which limits wetland management efforts.

#### 6.3 Possible measures to meet the challenges

The measures that could be implemented to address the above challenges are:

- → Establish a national policy for wetlands and a specific law to show a boundary demarcation of wetlands to help prevent encroachments.
- → Increase surveillance and enforcement activities, including arrests and prosecutions of offenders.
- $\rightarrow$  Apply effluent discharge standards, especially sure toxic industrial effluents.
- $\rightarrow$  Strengthen enforcement of EIA regulations on new development projects.
- → In consultation with the relevant competent authorities and prescribed by law, the land titles for the wetlands are canceled.
- → Preparation of wetland management plans to prioritize and guide wetland response measures.
- → Capacity building and empowerment of local authorities to carry out wetland management activities in their administrative areas.
- $\rightarrow$  Train local technicians and wetland resource user groups in the wise use of wetlands.
- $\rightarrow$  Involve local communities in wetland management.
- → Engage in an extensive awareness and education campaign about the importance of wetlands.
- → Carry out wetland valuation studies to demonstrate the goods and services to society that would be lost during the destruction of wetlands.
- → Conduct watershed management, including soil and water conservation and afforestation to reduce sediment exports to wetlands.
- → Strengthen intersectoral coordination at the policy and technical levels to reduce conflicting actions on wetlands from other sectors.

#### 7. ACTIVITIES CARRIED OUT FOR THE MANAGEMENT OF WETLANDS

#### 7.1 Overview

The Ministry of Environment, Agriculture and Livestock through the Burundian Office for Environmental Protection, the General Directorate of Environment, Water Resources and Sanitation some wetland-related activities to address key challenges for wetland protection and conservation.

Most of the activities were carried out thanks to the financing of the Government of Burundi and some of our financial partners. The main achievements are described below :

#### 7.2 Monitoring National Parks and Protected Areas on which Wetlands Depend

1. Parc National de la Rusizi (Site Ramsar) 2. Parc National de la Kibira 3. Paysage aquatique Protégé du Nord (Site Ramsar) 4. Parc National de la Ruvubu (Site Ramsar) 5. Paysage Protégé de Gisagara 6. Monuments Naturels des Chutes de Karera et des Failles de Nyakazu 7. Réserve Naturelle de la Malagarazi (Site Ramsar) 8. Réserve Forestière Naturelle de Bururi 9. Réserve Forestière Naturelle de Monge 10. Réserve Forestière Naturelle de Vyanda 11. Réserve Forestière Naturelle de Rumonge 12. Réserve Forestière Naturelle de Kigwena 13. Paysages Protégés de Makamba (Rukambasi & Mukungu) 14. Paysages Protégés de Makamba (Mabanda & Nyanza-Lac) 15. Paysage Protégé de Makamba (Kinoso)

This activity is a routine activity for National Parks and Protected Areas which is under the direct responsibility of the OBPE « Burundian Office for the Protection of the Environment "

In relation to activities related to improving knowledge on the different components of natural ecosystems for better decisionmaking for their conservation and sustainable management, plans (5) for development are being training developed, programs scientific and technical aspects of fauna and flora inventory,

conservation and biodiversity monitoring methods are being developed. We also plan to promote environmental education and monitoring through public awareness actions on environmental issues.

#### 7.3 Activities carried out for the integrated management of water resources.

- 1. A number of actions have been carried out through the Directorate General of the Environment, Water Resources and Sanitation to know :
- Protection of water sources by setting up protection perimeters in pilot catchments, Protection of the banks of the main rivers by planting bamboo and fixing herbs in accordance with the legal texts.
- 3. Monitor and enforce the water code, the environmental code and their application texts on rivers and lakes.

#### 7.4 Dissemination of information and awareness on wetlands

In prior years, the Government of Burundi through its Technical Services has conducted awareness and information campaigns by the celebration of World Wetlands Day (2 *February*), the World Water Day was born (*March 23*), World Migratory Bird Day (*second Saturday in May*) and the World Environment Day (*5 June*) to send messages on wetland conservation. This has raised the awareness of the population for the sustainable management of wetlands. It has also made it possible to integrate wetland management issues into the political and public agenda, school curricula and media programs.

## 8. PROGRAMS AND PROJECTS COMPLETED AND IN PROGRESS IN WETLANDS

#### 8.1 The Lake Victoria Basin Environmental Management Project, Phase II (LVEMP II)

This project is an initiative of the East African Community States, currently being implemented in the five countries that share the Lake Victoria Basin. These countries are Burundi, Kenya, Rwanda, Tanzania and Uganda. In Burundi, the LVEMP II project area is made up of Gitega, Karusi, Kirundo and Mwaro Provinces. It is a cross-border project designed to achieve two main development objectives namely:

- → Contribute to the improvement of the concerted management of the transboundary natural resources of the Lake Victoria basin among the Partner States;
- → Contribute to the improvement of environmental management in targeted high-risk sites and degraded and selected sub-catchment areas, for the benefit of communities dependent on the natural resources of the Lake Victoria Basin.

The project components are:

- (1) Strengthening institutional capacity for managing shared water and fisheries resources;
- 2) Control and prevention of point pollution;
- 3) Watershed Management
- Activities completed
  - → Activities to restore the buffer zone of the rivers by planting bamboos on the one hand and weeding herbs on the other hand were carried out by the beneficiaries themselves under the guidance of LVEMP II,
  - $\rightarrow$  Restoration of the Rweru Lake buffer zone,
  - $\rightarrow$  Fighting water hyacinth in Lake Rweru.

The project is funded by a donation of 9.3 million of DTS from the International Development Association (IDA), equivalent to US \$ 15 million for the signing of the financing agreement.

#### 8.2 KAGERA TAMP Project

The Kagera Basin Agro-Ecosystems Transboundary Management Program (TAMP Kagera) is a sub-regional project that brings together 4 countries sharing the basin namely Burundi, Rwanda, Tanzania and Uganda.

The overall goal of the project is to adopt an integrated ecosystem approach to land resource management in the Kagera Basin. To achieve this goal, the project is implemented through 4 interventions:

- → cross-border coordination and exchange of information to ensure consistency and operationalization of policies, planning strategies in the agricultural and environmental fields;
- $\rightarrow$  a favorable legislative and policy planning framework;
- $\rightarrow$  capacity building of stakeholders at all levels;
- → Adoption by farmers and pastoralists of land use systems and land management practices to improve agricultural productivity and food security in the target provinces of the project.

## 8.3 Project of Capacity Building in the Protected Areas Management System of Burundi for the conservation of biodiversity

The project aimed at strengthening the capacity of the Protected Areas Management System of Burundi for the conservation of biodiversity. It focuses on strengthening the institutional capacity of bodies in charge of protection and management of Protected Areas (PA). It covered the National Parks of Ruvubu and Kibira, two different environmental and socioeconomic ecosystems.

Much progress has been made both in terms of the drafting of laws, the conduct of both technical and thematic studies, the production of tools and the improvement of working conditions and the strengthening of the technical capacities of the country staff in charge of the environment in particular.

The law No. 1/10 of 30 May 2011 on the creation and management of Protected Areas in Burundi has been translated and disseminated in the national language "Kirundi".

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The National Biodiversity law has been developed and this project law is proceeding for adopting.

The participation of riparian communities has already had its effects in terms of protection, the use of natural resources for household consumption needs has greatly diminished, poachers have converted by handing over their equipment and equipment for hunting and trapping, currently they are part of park conservation support committees, including Aboriginal communities.

Due to the lack of financial resources for the project, the socioeconomic development activities for the neighboring populations have made little progress if one refers to the considerable needs of the populations living near these two parks.

Thus, the implementation of the project has left important socio-economic impacts such as:

- (i) improvement of the living conditions of the population and soil fertility, thus favoring the increase of agricultural production
- (ii) building the knowledge of stakeholders,
- (iii) job creation for women and young people,
- (iv) the involvement of women in decision-making bodies in park management support committees.

#### 9. EXPERIENCE WITH GOOD PRACTICES IN MANAGING WETLANDS

Good wetland management practices in Burundi (as indicated in the previous sections) are as follows:

- 1. Creation of Protected Areas for the conservation and restoration of ecosystems,
- 2. Designation and management of Ramsar sites of international importance under the Ramsar Convention on Wetlands,
- 3. Preparation of management framework plans for Protected Areas and wetlands in particular,
- 4. Restoration and protection of the buffer zones of lakes and rivers,
- 5. Application of regulations related to wetlands,
- 6. Conduct public awareness and education activities for wetlands.



## ONE RIVER ONE PEOPLE ONE VISION

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