



NILE-SEC
NILE BASIN INITIATIVE
INITIATIVE DU BASSIN DU NIL

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

WRM/WBS-2022-12

giz Deutsche Gesellschaft
für Internationale
Zusammenarbeit (GIZ) GmbH

On behalf of:



Federal Ministry
for the Environment, Nature Conservation
and Nuclear Safety

of the Federal Republic of Germany

Document Sheet

This Technical Report series publishes results of work that has been commissioned by the member states through the three NBI Centers (Secretariat based in Entebbe- Uganda, the Eastern Nile Technical Regional Office based in Addis Ababa - Ethiopia and the Nile Equatorial Lakes Subsidiary Action Program Coordination Unit based in Kigali - Rwanda. The content there-in has been reviewed and validated by the Member States through the Technical Advisory Committee and/or regional expert working groups appointed by the respective Technical Advisory Committees.

The purpose of the technical report series is to support informed stakeholder dialogue and decision making in order to achieve sustainable socio-economic development through equitable utilization of, and benefit from, the shared Nile Basin water resources.

Document	
Citation	NBI Technical Reports – WRM/WBS-2022-12
Title	Rwanda Wetlands Governance and Management Profile
Series Number	Water Resources Management/ Wetlands and Biodiversity Series 2022-12
Date	September 2022
Responsible and Review	
Responsible NBI Center	Nile-Secretariat
Responsible NBI	Dr Michael Kizza
Document Review Process	Nile Basin Initiative Wetlands Task Team and Lead Consultant
Author / Consultant	
Editor	Dr Nicholas Azza
Project	
Funding Source	German Federal Ministry for Environment, Nature Conservation and Nuclear Safety (BMU)
Project Name	Biodiversity Conservation and Sustainable Utilization of Ecosystem Services of Wetlands of Transboundary Relevance in the Nile Basin
Project Number	14.9029.1

Disclaimer

The views expressed in this publication are not necessarily those of NBI's Member States or its development partners. Trademark names and symbols are used in an editorial fashion and no intention of infringement on trade mark or copyright laws. While every care has been exercised in compiling and publishing the information and data contained in this document, the NBI regrets any errors or omissions that may have been unwittingly made in this publication. The NBI is not an authority on International Administrative Boundaries. All country boundaries used in this publication are based on FAO Global Administrative Unit Layers (GAUL).

Table of Contents

1.0 INTRODUCTION	4
1.1 About Rwanda.....	4
1.2 Wetlands of Rwanda	4
2.2 National and Nile Basin Transboundary Wetlands	5
3.0 POLICY AND LEGAL FRAMEWORK	6
3.1 policy framework	6
3.1.1 National Policy on Environment (2003).....	6
3.1.2 National policy for water resources management (2011).....	6
3.1.3 The Rwanda vision 2020	7
3.1.4 Land policy (2004)	7
3.1.5 Biodiversity policy (2011).....	8
3.2 legal framework.....	8
3.2.1 The constitution of the Republic of Rwanda (2003)	8
3.2.2 Organic law determining the use and management of land in Rwanda (2005).....	9
3.2.3 Organic law. Determining the modalities of protection, conservation and promotion of environment in Rwanda (2005).....	9
4.0 INSTITUTIONAL FRAMEWORK	10
4.1 Ministry of Natural Resources (MINIRENA).....	10
4.2 The Rwanda Natural Resources Authority (RNRA).....	10
4.3 Rwanda Environmental Management Authority.....	10
4.4 The Ministry of Agriculture and Animal Resources (MINAGRI).....	10
5.0 WETLANDS-RELATED INTERNATIONAL TREATIES TO WHICH THE COUNTRY IS A SIGNATORY.....	11
5.1 Ramsar convention 1971 and protocol 1972 (2002) (ratified).....	11
5.1.1 Rwanda's participation in the Ramsar convention	11
5.2 Additional International Agreements	11

6.0 MAIN CHALLENGES AND OPPORTUNITIES	12
6.1 main challenges	12
6.1.1 Agricultural intensification.....	12
6.1.2 Over Exploitation of Natural Resources.....	12
6.1.3 Low technical capacity of different stakeholders	13
6.1.4 Additional Challenges	13
6.2 Root Causes of Environmental Challenges.....	14
6.3 Potential Measures for Addressing the Challenges.....	14
6.4 Opportunities for Addressing the Challenges	14
7.0 KEY WETLAND MANAGEMENT ACTIVITIES AND ACHIEVEMENTS	15
8.0 PAST AND ONGOING WETLAND PROGRAMS AND PROJECTS	15
9.0 EXPERIENCE CONCERNING GOOD WETLAND MANAGEMENT PRACTICES ..	16

1.0 INTRODUCTION

1.1 About Rwanda

Rwanda is a landlocked republic that lies to the south of the equator and is located in east central Africa with Kigali as its capital which is located at Ruganwa River, the centre of the country. The country is widely known for its magnificent scenery and is mostly referred to as the land of a thousand hills. Rwanda is bordered by Burundi, Uganda, Tanzania and the Democratic Republic of Congo. Rwanda presents a geographically small country and is amongst the countries with the highest population densities in the sub-Saharan Africa. The country is highly elevated and is found in the African Great Lakes region with its geography greatly dominated by savannah to the east and mountains to the west with many lakes all over the country. The climate of the area is temperate to subtropical with two dry seasons and two rainy seasons every year.

The Rwandan economy is mostly based on subsistence agriculture with tea and coffee being the major exported cash crops. The tourism sector has also thrived well in the country and is currently the top leading foreign exchange earner for the country. Rwanda is among the few countries in which people can safely visit mountain gorillas, the fee for tracking permits is however high. Music and dance are vital parts of the Rwandan culture, the highly designed *intore* dance and drums in particular.

1.2 Wetlands of Rwanda

Rwanda has a very rich wetland cover of approximately 280,000 ha and this accounts for about 11% of the total land of the country. Rwanda has been divided into two drainage basins which include the Nile to the east that covers a total of 67% while delivering 90% of the national waters and Congo to the west covering 33% while handling all national waters. These wetlands provide critical habitats for wildlife and biodiversity, they maintain important hydrologic processes which are essential in cleaning and protecting the surface and ground water, and they support a variety of local livelihoods.

Despite these benefits, these wetlands are experiencing a myriad of challenges as a result of land use conversions, over utilization of and competition for resources and climatic factors. Rwanda's wetlands are the fastest lost and degraded compared to any other ecosystems in the country. Currently more than half of the wetlands in Rwanda are being used for agricultural activities and energy production.

2.2 National and Nile Basin Transboundary Wetlands

Rwanda has a total of 860 wetlands with four Nile basin Transboundary wetlands. These are the Kamiranzovu Swamp on Rukarara River in Rusizi; Lake Muhazi on Nyabugogo River in Kigali; Rugezi Swamp on Ruhondo Lake in Gicumbi, Musanze and Mugesera Rweru Swamp Complex on Nyabarongo River in Kigali, Kibungu.



Photo 1: The Wetland

3.0 POLICY AND LEGAL FRAMEWORK

3.1 Policy Framework

A number of Policies have been put forward for the conservation and management of wetland ecosystems in Rwanda. The main ones include:

3.1.1 National Policy on Environment (2003)

This policy ensures the protection and management of the environment sustainably. It proposes on the reinforcement of human and institutional capacity building in regards to the environment in addition to sensitizing the population for the main purpose of protecting the environment. On wetland management the policy proposes:

1. To promote the rehabilitation of wetland ecosystems which are under degradation and to restore endangered species.
2. To set up protective measures for slopes to prevent the degradation of swamps.

The guiding principles of this policy among others are:

1. Environmental impact has to be analysed when carrying out studies of development projects. Wetlands are a part of this and this therefore prevents the degradation of these vital ecosystems.
2. An effective and active participation of the entire population of environment management and protection

3.1.2 National policy for water resources management (2011)

The 2004 policy was revised as it failed to address some conflicting challenges like changing water demands, rapid urbanization pressures which widely affects wetlands, inappropriate land use practices and climate change uncertainties. However, this revised policy does address all these issues. The vision of this policy is possess water resources sub-sector that is governed by a policy, legal and institutional framework which will promote the sustainable water resource use in wetlands and other ecosystems for the purpose of also contributing to the socio-economic development of the country. The policy outlines a number of fundamental principles of the water resources management in Rwanda which are based upon the best practices of international water resources management. Some of these principles include:

1. The international water resource benefits must be shared equally.

2. Integrated management of water resources is a key aspect
3. The catchment-based water resources management is required.

The Rwanda Government has introduced reforms in the water sector over the last years based on this policy which has significantly made a change in the context of water resources management (wetlands).

3.1.3 The Rwanda vision 2020

Rwanda has an explicit goal in its vision 2020 in which it intends to attain an economic growth which relies on the natural resources of the country while fully employing sustainable development. The Rwandan government seeks that ‘by the year 2020 it would have built a nation where the pressure impacted on natural resources, land in particular, biodiversity and biomass in addition to water will significantly have been reduced and environmental degradation and pollution will also be reversed, a nation where the management and protection of resources together with the environment are well regulated and are more rational of preserving and giving the future generations that basic wealth which is necessary for sustainable development’.

The vision is an ambitious one especially considering the fact that a total 90% of the Rwandan population relies wholly on agriculture and land pressure results to encroachment in those areas which have been put aside for the protection of biodiversity or for those important ecological processes that originate from the vital services which these large percentage of individuals as well as the economy relies upon. Some of these processes include soil fertility, pollination, biodiversity, flood regulation in addition to water and food provision.

3.1.4 Land policy (2004)

The policy came as a result of the recommendations of vision 2020 where land use management had been viewed as a fundamental tool in development. The overall objective of this policy is ‘to establish a land tenure system which guarantees tenure security for Rwandans and gives guidance to land reforms with a view of good management and the rational utilization of national land resources’. This policy and subsequent laws and orders have solved crucial land ownership problems as well as land gender equity. The land policy has also a good provision in the protection of natural ecosystems, marshlands and wetlands. On the other hand, the high population density issue that leads to land pressure still remain a concern to the Rwandan citizens.

3.1.5 Biodiversity policy (2011)

The main reason behind this policy is to provide an overarching framework for sustainable utilization, conservation, equitable sharing of biodiversity resources as well as access to these resources. The policy has a number of objectives which include.

1. Eradicating, controlling and preventing biodiversity threats that wetlands are part of.
2. Sustainable development and environmental sound outside all protected areas
3. Conserving the diversity of ecosystems (wetlands), landscapes, populations, habitats, species and communities in the country.
4. Sustainable use of biological resources while minimizing adverse impacts on biological diversity.
5. Expanding human capacity on the conservation of wetlands, to manage its use and address those factors which threaten it.
6. Creating incentives and conditions which support conservation and the sustainable use of biodiversity

A biodiversity law was given out for implementing the policy in the year 2013 following the policy. The law determines the modalities for conservation and management of biological diversity in Rwanda. This entails a set of criteria put forward for the purpose of developing biodiversity strategies together with management plans by stakeholders and government institutions.

3.2 Legal Framework

3.2.1 The constitution of the Republic of Rwanda (2003)

This is the supreme law of the land which provides that every citizen holds the right to live in a safe and satisfactory environment and further ensure that every person is obligated safeguard, protect and ensure environment promotion. The state ensures environmental protection (including wetlands) and that every person has the right over individual, private or collective property. These properties are inviolable and shall not be interfered with apart from public interest only and after a fair prior compensation. The state also guarantees land ownership and other real rights which govern the land.

3.2.2 Organic law determining the use and management of land in Rwanda (2005)

Article 1 of the organic law determines the management and use of land in Rwanda. It institutes the principles which are respected on the land legal rights and accepted on any land in the country in addition to other appendages whether they are artificial or natural.

Article 12 of the law states That any land which makes up the public Domain consists of all the land which is meant to be used by the public or it is land that has been reserved for organs of state services together with national land that has been set aside for environmental protection. According to this article, national land that has been reserved for environmental conservation purposes is composed of reserved swamps, natural forests, public gardens and national parks.

3.2.3 Organic law. Determining the modalities of protection, conservation and promotion of environment in Rwanda (2005)

This law gives an effect to the National Policy of Environment that sets out on how to protect, conserve and promote the environment. The law defines the responsibilities of every citizen and clearly defines the principles for utilizing natural resources like water and air and protecting biodiversity among many more. The law orders environmental impact assessment to mitigate adverse environmental impacts.

Article 15 of the law states that:

“Rivers, underground water, springs, artificial lakes and natural lakes are part of the public domain’ and their use is at the disposal of each individual in accordance with the law.”

Article 17 further states that:

“the use and management of water and its resources shall not in any way use methods which are unfair like exploitation which may lead natural disasters like drought and flood. Any acts that are concerned with water resources like plant watering; the use of wetlands and swamps among others shall always be subject to a prior environmental impact assessment to measure and mitigate the possible impact outcomes.”

4.0 INSTITUTIONAL FRAMEWORK

4.1 Ministry of Natural Resources (MINIRENA)

Develops and implements policy and legislation regarding land use and environmental protection, and thus, oversees wetland management activities.

4.2 The Rwanda Natural Resources Authority (RNRA)

This is a sub-agency of the ministry mandated to protect the environment and it is responsible for land use planning and management of water, forests and mineral resources.

4.3 Rwanda Environmental Management Authority

This is also another sub-agency of the Ministry of Natural Resources and it oversees compliance with set environmental regulations and approves all the Environmental Impact assessments.

4.4 The Ministry of Agriculture and Animal Resources (MINAGRI)

This ministry works together with the Ministry of Natural Resources in coordinating the review and approval of proposals for any agricultural activities in the wetlands. It is however unclear the size of the project which warrants interagency coordination.

5.0 WETLANDS-RELATED INTERNATIONAL TREATIES TO WHICH THE COUNTRY IS A SIGNATORY

5.1 Ramsar convention 1971 and protocol 1972 (2002) (ratified)

5.1.1 Rwanda's participation in the Ramsar convention

Ramsar convention is an international treaty with a mission of promoting the conservation and wise use of worldwide wetlands by employing local, national and International actions and cooperation for the purposes of achieving sustainable development. Rwanda ratified this convention in 1st April, 2006 and currently has one wetland (Rugezi wetland) gazetted as a Ramsar site that covers a total surface area of 6736 hectares and a number of other wetlands of International importance which have been proposed to be gazetted to the convention as Ramsar Sites. (The Ramsar Sites) covering a total surface area of 6736 Hectares.

5.2 Additional International Agreements

1. The united nations framework convention on climate change 1998
2. The united nations convention to combat desertification 1999
3. Convention on International Trade in Endangered Species of world fauna and flora (CITES) (1981)
4. The Kyoto protocol (2005)
5. Convention concerning the protection of the world culture and natural heritage (2000)
6. Convention on Biological Diversity (1995)

6.0 MAIN CHALLENGES AND OPPORTUNITIES

6.1 main challenges

6.1.1 Agricultural intensification

The wetlands have been intensively cultivated for crops like flowers, rice, eucalyptus, sweet potatoes and sugarcane. These activities have negatively impacted upon the wetlands which have been evident in quite a number. Those wetlands which are under the traditional utilization of water, fodder, livestock and small scale agriculture have the ability to regulate water flow. When this water is drained and utilized for intensive agriculture, the water is rapidly conveyed downstream which reduces the ability of the wetland to buffer peak flows, hold water and retain sediment.

6.1.2 Over Exploitation of Natural Resources

The extensive use of wetlands for the purpose of generating hydropower and as mine for clay, sand, gravel and peat include the most direct threats which are faced by wetlands in Rwanda. The hydropower plants usually require sufficient amount of water which and are mostly connected to the wetland schemes. The hydroelectric power plants are usually more susceptible to sedimentation which as a result damages turbines and tubing due to the inadequate storage capacity of wetlands. The drop of water levels has serious economic losses. A good example of this is seen in the Rugezi wetland.



Photo 2: Pasture Harvesting in the Wetland

6.1.3 Low technical capacity of different stakeholders

An assessment on Rwandan wetlands showed an unsatisfactory performance on the agricultural wetlands of the country. Among the reasons behind this kind of a performance include, unavailability of the required skills in rural engineering, unclear right to the access of wetlands and property rights in addition to poor designs of the water control works. Another factor that clearly came out from this is that the conversion of wetlands does not always put into consideration the opportunity costs required for developing the critical wetland ecosystems.

6.1.4 Additional Challenges

1. Reclamation and encroachment
2. Urbanization and industrial activities
3. Inadequate wetland policy
4. Alien and invasive species which continue to alter the biodiversity balance of the ecosystems that as a result decrease the services which they provide.
5. Inadequate financial and human resources
6. Poor baseline information
7. Lack of awareness on the values of wetland ecosystem goods and services.



Photo 3: Encroachment in Rwanda Wetlands (The East African)

6.2 Root Causes of Environmental Challenges

1. Land shortage in the country
2. Rural-urban migration which has been brought about by the growth of towns in the country
3. Industrialization, especially industries which are located around the wetlands
4. Poverty, which has forced a wide range of people to rely on wetland resources for survival
5. Pollution and illegal mining
6. Infrastructure development such as industrial parks
7. High population and climate change

6.3 Potential Measures for Addressing the Challenges

1. Elaborating technical tools for watersheds and marshlands management
2. Reform of the water sector
3. Setting legal instruments for the Rwanda marshlands Sustainable Management
4. Improving wetland management
5. Creating capacity building tools for the sustainable management of Rwanda marshlands

6.4 Opportunities for Addressing the Challenges

1. Indigenous knowledge in wetland use.
2. Knowledge, political and public awareness
3. The role of wetlands in economic development and the contribution which they have on the livelihoods of the Rwanda farmers.

7.0 KEY WETLAND MANAGEMENT ACTIVITIES AND ACHIEVEMENTS

The implementation of projects in the framework of multilateral environmental agreements (UNCCD, CBD and UNFCCC) which provided financial and technical support to the women and youth associations through conducting activities like providing support to the implementation of projects and implementing different associations in project development which has resulted to the protection and conservation of the biodiversity in various ecosystems including wetlands and also contributed to climate change impact mitigation.

Education and awareness campaigns for the rehabilitation of wetlands in collaboration with national leaders, local leaders, communities and environmental experts

Designation of Ramsar Sites to ensure better protection and conservation of wetlands of international importance in Rwanda

Restoration activities of important wetland ecosystems for example the restoration of Rugezi Wetland since 2005 which has seen it gain its status as a Ramsar Site

8.0 PAST AND ONGOING WETLAND PROGRAMS AND PROJECTS

1. Integrated Management of Critical Ecosystems Project (IMCE), (2006-2011) that resulted in wetlands inventory and categorization and Lake Victoria Environment Management
2. Intervening in Akagera River linked to Lake Victoria.
3. Wetlands Restoration of Rugezi Wetland earning Green Globe Award 2010
4. Mapping and Categorization of all wetlands, Relocation of Gokondo Industrial Zone from wetlands area to Masoro

9.0 EXPERIENCE CONCERNING GOOD WETLAND MANAGEMENT PRACTICES

1. Establishment of various environmental protection institutions mandated to the conservation and protection of wetlands.
2. A comprehensive list of Rwanda's swamps, their geographical limits and regulations of their management and use was established by a ministerial order to give effect to the organic law.
3. A detailed map that contains Rwanda's wetlands inventory has been developed. This wetland protection levels map assigns different utilization categories of either unconditional exploitation (which is the most permissive and covers 6 per cent of the total wetland area), conditional exploitation (which represents 74 per cent of the total wetland area), or total protection (which is the most stringent utilization category and accounts for 20 per cent of the entire country's wetland area).
4. The strategic environmental assessment (SEA) tool is now increasingly used to evaluate the environmental impacts of policies, plans and strategies that affect wetlands in Rwanda.
5. Development of the Atlas of Rwanda's changing Environment which outlines the current conservation status and management of wetlands and the opportunities for adoption of better conservation measures and best management practices.
6. Wetlands Restoration activities, for instance the restoration of Rugezi wetland that saw Rwanda win the Green Globe Award for the Restoration of this wetland
7. Development of a Master Plan for wetlands development, soil conservation and watershed protection by MINAGRI that led to the classification of wetlands in accordance with their hydrological aspects and their level of degradation.



ONE RIVER
ONE PEOPLE
ONE VISION

Nile Basin Initiative Secretariat
P.O. Box 192
Entebbe – Uganda
Tel: +256 414 321 424
+256 414 321 329
+256 417 705 000
Fax: +256 414 320 971
Email: nbisec@nilebasin.org
Website: <http://www.nilebasin.org>

Eastern Nile Technical Regional
Office
Dessie Road
P.O. Box 27173-1000
Addis Ababa – Ethiopia
Tel: +251 116 461 130/32
Fax: +251 116 459 407
Email: entro@nilebasin.org
Website: <http://ensap.nilebasin.org>

Nile Equatorial Lakes Subsidiary
Action Program Coordination Unit
Kigali City Tower
KCT, KN 2 St, Kigali
P.O. Box 6759, Kigali Rwanda
Tel: +250 788 307 334
Fax: +250 252 580 100
Email: nelsapcu@nilebasin.org
Website: <http://nelsap.nilebasin.org>

 [/Nile Basin Initiative](https://www.facebook.com/Nile-Basin-Initiative)

 [@nbiweb](https://twitter.com/nbiweb)

 [ENTRO](https://www.facebook.com/ENTRO)

 [NELSAP-CU](https://www.facebook.com/NELSAP-CU)