



# **TEN YEAR TRANSBOUNDARY STRATEGIC PLAN (2009-2018)**

**Nyungwe – Kibira Landscape**

Supported by

**Wildlife Conservation Society**



**October 2009**

### **Adoption of the Plan**

This Transboundary Strategic Plan for the Nyungwe – Kibira Landscape, a part of the Arbertine Rift Region, has been adopted by the two Protected Areas Authorities, as attested below:

.....  
For Rwanda Development Board / Tourism and Conservation      Date  
(RDB/T&C)

.....  
For Institut National pour l'Environnement et la Conservation      Date  
de la Nature (INECN)

Witness :  
.....  
For Wildlife Conservation Society (WCS)      Date

## Table of Contents

<b>Adoption of the Plan.....</b>	<b>2</b>
<b>Table of Contents.....</b>	<b>3</b>
<b>Foreword .....</b>	<b>5</b>
<b>Acknowledgement .....</b>	<b>6</b>
<b>Acronyms .....</b>	<b>7</b>
<b>List of tables and Figures.....</b>	<b>8</b>
<b>SUMMARY.....</b>	<b>9</b>
<b>PART A: Background.....</b>	<b>11</b>
<b>1. INTRODUCTION .....</b>	<b>11</b>
<b>2. THE CONCEPT OF TRANBOUNDARY NATURAL RESOURCE MANAGEMENT (TBNRM). .....</b>	<b>11</b>
<b>3. THE TRANSBOUNDARY NATURAL RESSOURCE MANAGEMENT IN THE ALBERTIN RIFT .....</b>	<b>13</b>
3.1. <i>Biodiversity of the Albertine Rift.....</i>	<i>14</i>
3.2. <i>Threats to biodiversity in the Arbertine Rift .....</i>	<i>15</i>
3.3. <i>The planning process in the AR .....</i>	<i>17</i>
<b>4. THE NYUNGWE-KIBIRA TBNRM PROCESS .....</b>	<b>19</b>
4.1. <i>Profile of Nyungwe-Kibira Landscape (Figure 2).....</i>	<i>19</i>
4.1.1. <i>Nyungwe National Park .....</i>	<i>20</i>
4.1.2. <i>Kibira National Park .....</i>	<i>21</i>
4.2. <i>The Transboundary planning processs in Nyungwe and Kibira.....</i>	<i>21</i>
4.3. <i>The TSP development plan .....</i>	<i>22</i>
4.4. <i>Situation Analysis .....</i>	<i>23</i>
<b>PART B: The Plan.....</b>	<b>27</b>
<b>5. THE PLAN PURPOSE .....</b>	<b>27</b>
<b>6. STRATEGIC OBJECTIVES (SO) .....</b>	<b>27</b>
6.1. <i>SO 1. Policies and laws are in place and harmonized for the sustainable development and conservation of the landscape Kibira-Nyungwe. ....</i>	<i>28</i>
6.2. <i>SO 2. Capacity to manage the N-K TB for institutions and others stakeholders is enhanced. ...</i>	<i>28</i>
6.3. <i>SO 3. The ecological, economic and social values of the Nyungwe-Kibira landscape are well understood. ....</i>	<i>30</i>
6.4. <i>SO 4. Attitude and behaviour of stakeholders have changed because of the good understanding of the value and importance of the Nyungwe-Kibira landscape. ....</i>	<i>31</i>
6.5. <i>SO 5. Conservation of the Nyungwe-Kibira landscape contributes to the human welfare at local, regional and international levels. ....</i>	<i>32</i>

---

6.6. SO 6. Nyungwe -Kibira landscape is restored and well protected .....	33
6.7. SO 7. Functioning regional collaborative mechanisms are in place.....	34
6.8. SO 8. Long -term sustainable financing mechanisms established .....	35
<b>7. NYUNGWE-KIBIRA TSP IMPLEMENTATION.....</b>	<b>44</b>
7.1. Institutional arrangement of the TSP implementation.....	44
7.1.1. Transboundary Inter-ministerial Board.....	46
7.1.2. Transboundary Core Secretariat.....	46
7.1.3. Technical Committees.....	46
7.1.4. Regional Transboundary Forum .....	47
7.2. Operational Planning.....	47
7.3. Funding.....	47
<b>8. BUDGET ESTIMATES .....</b>	<b>48</b>
<b>9. MONITORING FRAMEWORK.....</b>	<b>60</b>
<b>References: .....</b>	<b>65</b>
<b>Appendices .....</b>	<b>66</b>
<b>Appendix 1: List of Participants .....</b>	<b>66</b>
<i>Meeting, July 27<sup>th</sup> 2009.....</i>	<i>66</i>
<b>Appendix 2: MoU between ORTPN and INECN on the Transboundary Management of Nyungwe- Kibira Landscape .....</b>	<b>Error! Bookmark not defined.</b>

**Foreword**

The Transboundary Management between the two sister countries of Rwanda and Burundi started several years back as informal collaboration among staff at field level. It is gratifying to note that it did not stop there but effort was fully recognised as wonderful strategy and fully adopted by the PAAs of the two countries.

TB collaborative management for that matter is never easy. There are too many interests to cater for, sometimes opposing ones with very limiting resources. But once the commitment and the will to make it work, as surely there is, the load, though still heavy is made a little bit easier to carry. We only need to recognise that the benefits, as far as ecosystem management is concerned, are very many and that the collaboration results in many positive attributes for the region. These attributes are highlighted in this plan.

Granted, we have reached far. We cannot however sit back and say “we have arrived”, for the journey is still very long. We need to solicit and obtain the required funding to enable us to implement all the noble strategies contained herein. Without the availability of the required resources, this will remain just – a plan- and our efforts will have been for nought.

We all need to fire our best shots to ensure that this Strategic Plan, the result of our collaborative effort, is implemented so that we can realise our vision:

*The integrity of Nyungwe-Kibira Ecosystem is restored; its ecological, economic and social values are recognised and accessible for the sustainable development at local, national and global levels*

.....  
Chairperson of the Transboundary Core Secretariate for Nyungwe – Kibira Landscape

**Acknowledgement**

The Management Authorities of Nyungwe National Park and Kibira National Park wish to express their gratitude to all those who contributed to the development of this plan. They express their thanks to the Core Planning Team and the entire family of the conservation stakeholders for contributions offered throughout the entire process of the elaboration of this Plan.

Lastly, the Management Authorities of Nyungwe and Kibira National Parks wish to thank the Wildlife Conservation Society (WCS) for the financial contribution, without which there would have been no plan.

**Acronyms**

CBO: Community Based Organisation

CM : Collaborative Management

EIA: Environmental Impact Assessment

INECN: Institut National pour l'Environnement et la Conservation de la Nature

IUCN: World Conservation Union

M&E: Monitoring and Evaluation

MoU: Memorandum of Understanding

NGO: Non Gouvernemental Organisation

N-K L: Nyungwe – Kibira Landscape

PA (A): Protected Area (Authority)

RDB T&C: Rwanda Development Board/ Tourism & Conservation

S: Strategy

SO: Strategic Objective

Spp: Species

SWOT: Strength, Weaknesses, Opportunities, Threat Analysis

TB NRM: Transboundary Natural Resource Management

TB: Transboundary

TCS: Transboundary Core Secretariate

ToRs: Terms of Reference

TSP: Transboundary Strategic Plan

WCS: Wildlife Conservation Society

Yr: Year

---

## List of tables and Figures

### List of Tables

**Table 1.** Relative ranking of sites for ‘species richness’ and ‘endemic and threatened’ species in Albertine Rift PAs (National Parks and Forest Reserves)

**Table 2.** A summary of the threats identified for each conservation target in the Albertine Rift eco-region

**Table 3.** SWOT Analysis for Nyungwe-Kibira Landscape

**Table 4.** Total economic value of Nyungwe watershed

**Table 5.** Transboundary Strategic Plan Timeline

**Table 6:** Budget estimates

**Table 7:** Budget Summary

**Table 8:** Monitoring Framework

### List of Figures

**Figure 1.** Map showing the extent of the Albertine Rift

**Figure 2.** The six management planning units as defined in the 2004-30 Framework for Conservation in the Albertine Rift.

**Figure 3.** The Congo-Nile Divide showing the Nyungwe and Kibira transboundary protected area (Rwanda and Burundi).

**Figure 4: Joint planning between INECN and ORTPN**

**Figure 5:** The Transboundary Planning Meeting in Kayanza, July 2009

**Figure 6.** Retention Dam, which provides water flow to enable the functioning of the Rwegura Power Plant. The picture illustrates the alarming reduction of water level in the Dam.

**Figure 7:** Restoration activities in Nyungwe National

**Figure 8:** Institution Set up and Linkages

## SUMMARY

As part of the Albertine Rift Region, the Nyungwe – Kibira Landscape is globally recognised for its conservation value. This ecosystem forms the largest protected mountain forest block remaining in the east central Africa. It is one of the most species rich landscapes with a very high level of endemism. This ecosystem is transboundary by nature, encompassing the two National Parks, namely the Nyungwe National Park (Rwanda) and the Kibira National Park (Burundi). These two PAs face similar threats, thus the need for a collaborative effort to strengthen biodiversity conservation and PA management across the border.

This 10 year Transboundary Strategic Plan has been developed by the two Protected Areas Authorities of Rwanda and Burundi together with key partners. Its implementation shall be supported by a variety of stakeholders relevant to biodiversity conservation and socio-economic development within the Nyungwe-Kibira Landscape. The Transboundary Strategic Planning Process for the whole of the Albertine Rift was initiated in 2001. This Strategic Plan takes this process forward, focussing it on the wildlife protected areas of Nyungwe and Kibira.

The planning process has been consultative, spearheaded by the PAAs through a Core Planning Team with the assistance of a facilitator. The planning was carried out using the SWOT Analysis, which formed the basis for developing strategic objectives and the strategies as well as key activities to carry out for achieving them. Indicators of progress were formulated and form the basis for the monitoring of the plan.

A 30 year vision was formulated as *“The integrity of Nyungwe-Kibira Ecosystem is restored, its ecological, economic and social values are recognised and accessible for the sustainable development at local, national and global levels”*;

While the goal for the plan is: *“The transboundary collaboration mechanisms are established; and operational for an integrated management of the Nyungwe-Kibira Ecosystem”*

The strategic objectives give direction to the plan, highlighting the plan’s intentions over the next 10 years. This part of the plan gives guidance for operational planning and act as a reference for monitoring progress and evaluating performance.

A structure for decision making and to guide the transboundary natural resource management shall be formalised and shall include:

- A Transboundary Interministerial Board
- The Transboundary Core Secretariate, with an Executive Secretariate to carry out the daily activities related to the transboundary collaboration and management
- The Technical Committees for Ecological monitoring and Research, Tourism, Community Conservation and Enterprises, Security and Law Enforcement
- A Regional Forum to ensure collaboration and harmony amongst stakeholders

The plan shall be implemented through the management planning and programme development at regional level and operational planning at the national and regional

levels. The budget highlighted is only indicative and shall be fine-tuned during operational planning or during development of discrete projects targeting any SO. It is the duty of the TCS and the respective governments to identify potential sources of funding, lobby and negotiate with potential donors.

## **PART A: Background**

### **1. INTRODUCTION**

This Transboundary Strategic Plan has been developed by the two Protected Areas Authorities of Rwanda and Burundi together with key partners. It will be implemented with support from a variety of stakeholders including, but not limited to local communities, other government agencies, NGOs, CBOs, the private sector, International Community / International organisations, etc.

The TB protected Area Management across the two countries started several years back as informal collaboration between the management of the two national parks. The focus was to collaborate in curbing down the illegal activities across the border. Formal recognition of the transboundary effects happened with the signing of the MoU between RDB T&C and INECN in 2008, highlighting the importance of the collaboration across the political boundary, in a bid to apply the modern landscape approach for biodiversity conservation in PA Management.

TBNRM is used in reference to cooperation across boundaries in relation to improved management of natural resources.

The Transboundary Strategic Planning Process for the whole of the Arbertine Rift was initiated in 2001. The output from this process was a *Framework of for Conservation in the Arbertine Rift 2004-2030*. This Strategic Plan takes this process forward, focussing it on the wildlife protected areas of Nyungwe and Kibira.

### **2. THE CONCEPT OF TRANBOUNDARY NATURAL RESOURCE MANAGEMENT (TBNRM).**

Transboundary Natural Resource Management has emerged in biodiversity conservation to respond to the many ecological, social, political and economic problems. It has appeared through various concepts such as Transboundary Natural Resource Management (TBNRM), Peace Parks, Transboundary Protected Areas (TBPA) or Transfrontier Conservation Areas (TFCAs).

This concept is not new; in early 1925 Poland and Czechoslovakia signed the Krakow Protocol, which led, in 1945, to the establishment of a transfrontier park in the Tatra Mountains (Zaremba, 2002). In the same year, the park Albert in the Virunga was created in what was the then Rwanda, the Belgian Congo and Urundi and became a cross-border park after the independence of the Belgian Congo (now Democratic Republic of Congo - DRC) in the 1960. The world first peace park was designated in 1932 between Glacier National Park in the USA with Western Lakes National (Sandwith et al.2001). Recently TNBRM has, however, gained much interest of various stakeholders; governments, NGOs and donors. The number of TBNRMs has grown rapidly from 59 in 1988 to 188 in 2005, involving more than 666 individual protected areas and representing more than 113 countries (Sandwith et al. 2001, Ali 2007). The 170 countries which have ratified the Convention on Biological Diversity have all espoused the principle of an ecosystem approach to conservation. In Africa alone, 35 complexes involving 34 countries and including 148 individual protected

areas were counted (Van der Linde et al. 2001). The TBNRM approach has got support from donors (World bank, ...) and world leaders. Nelson Mandela, former president of South Africa, has endorsed this approach “I know of no political movement, no philosophy, no ideology, which does not agree with the peace parks concept as we see it going into fruition today. It is a concept that can be embraced by all (Amerom and Buscher, 2005)”

TBRNMs involve many terms which are close and interrelated and need to be well understood. Transboundary Protected Areas (TBPAs) are defined as an “area of land/or sea that straddles one or more boundaries between states, sub-national units etc. especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed co-operatively through legal or other effective means” (Sandwith et al. 2001, p.3). Transboundary Protected Areas (TBPAs) and Tranfrontier Conservation Areas (TFCAs) were initially considered as having almost same meaning, since both implied large areas that straddle boundaries with one or more protected areas between two or more countries (Zaremba, 2002). The differences between the two come from the management perspective. The TBPAs is referred to a commonly managed areas as one integrated unit shared between different countries when the TFCAs is related to various management plans with a shared common overall objective such as sustainable of natural resources (Zaremba, 2002).

On the other hand, peace parks are defined as “transboundary protected areas that are formally dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and to the promotion of peace and co-operation” (Sandwith et al. 2001, p. 3). Both TBPAs and Peace Parks are considered by IUCN as a subset of protected areas and should conform not only the IUCN definition of protected area but also to one or more of the six IUCN protected area management categories( Sandwith et al. 2001, p.4 ).

Concerns about the scale, use of protected areas criteria and the interests of different stakeholders, such as economic development, strengthening socio-cultural ties, political stability or sustainable management and ecological processes were revised into a holistic approach “ Transboundary Natural Resource Management” (TBNRMs) (Van der Lind et al. 2001). TBNRM is defined as “any process of cooperation across boundaries that facilitates or improves the management of natural resources to the benefit of all parties in the area concerned” (Katerere et al. 2001, Van der Linde et al. 2001).

The main principles of TBNRM are in accordance with the biodiversity conservation objectives defined in the Convention on Biodiversity (CBD) ( Zaremba, 2002, p. 18):

- Democracy: initiatives should be for the “people”- the users, managers and beneficiaries of resources, with stakeholders being involved at all stages.
- Sustainability of natural resource use, human resources and institutions.
- Efficiency: the benefits of TBNRM must outweigh the total costs of the process and can be achieved by building on existing resource management and institutions.

The development of TBNRM is also related to a global movement whose perspective is that the world is becoming smaller and more interconnected and that, problems of

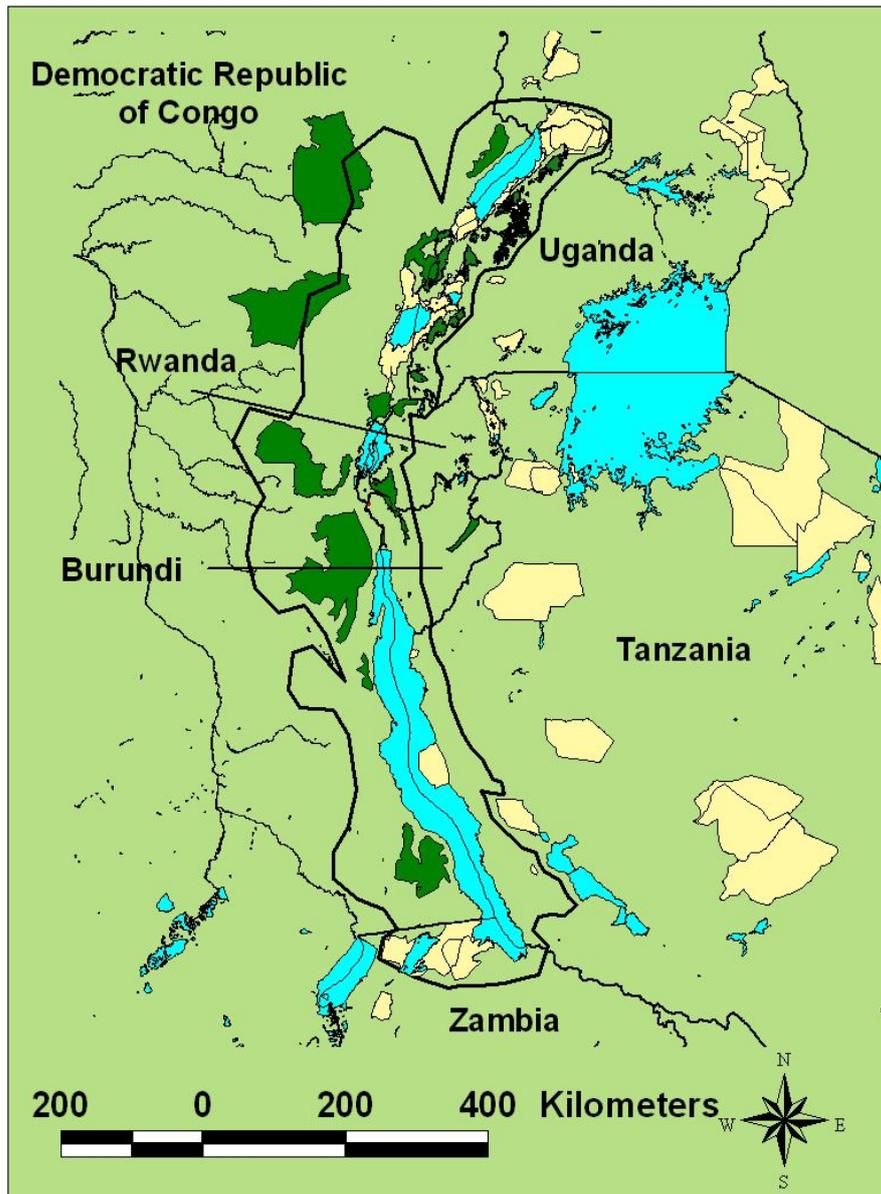
'global commons' like the loss of the biological diversity, climate change, the loss of the ozone layer and the degradation of the marine environment need 'global solutions' (Katerere et al. 2002, Wood et al. 2000). Adger et al (2001, p.683) note "The global environmental crisis implied in environmental change discourses require global solutions. Hence, international action is necessary. This action should be coordinated by multi-lateral agencies and regulatory framework". The global movement justifies, the interest today of international and northern institutions and organizations to the TBNRM programmes (Katerere et al. 2002).

Even if it is believed that The TBNRM discourse has many objectives including political and economic objectives, it has created new opportunities for biodiversity conservation and socio-development across borders in Africa. The development of the TBNRMs has been facilitated by (1) the existing international agreements including the convention on biodiversity, World Heritage Convention, Ramsar Convention, the UN Convention on Law of the sea (2) the existing international programmes and institutions (UNESCO, UNEP) and (3) other relevant conventions providing potential support and justification (CITES, Convention on Migratory Species (CMS).....).

The development of TBNRM in Africa coincided with the efforts of integration of economic development on a regional level despite, the prevalence of many crises and wars in many countries in the continent. The organisations involved include the Economic Community of West African States (ECOWAS), the Central African Economic and Monetary Community (CAEMC), the East African community (EAC), the Common Market for East and Southern Africa (COMESA), the Southern African Development Community (SADC) and the Spatial Development Initiative (SDI). The New Development Partnership for Africa's Development (NEPAD), has TBNRM in its eight priority sub-themes, seeking to support and boost conservation, tourism and protect jobs on the emerging initiatives and partnerships (Zaremba, 2002).

### **3. THE TRANSBOUNDARY NATURAL RESSOURCE MANAGEMENT IN THE ALBERTIN RIFT**

The Albertin Rift extends from 30 km north of the Lake Albert to the Southern tip of Lake Tanganyika, including the valley, flanks of the escapement and associated protected areas. The area covers around 313,000 km<sup>2</sup> and the habitat range from the glaciers and rock at the top of the Ruwenzori mountains (5,100m), down through alpine moorland (3,400-4,500m), Giant Senecio and Lobelia vegetation (3,100-3,600), giant heather (3,000-3,500), raised bogs (3,000-4,000), bamboo forest (2,500-3,000), montane forest (1,500-2,500), to lowland forest (600-1,500), savannas woodland (600-2,500) and savannas grass land (600-2,500).



**Figure 1.** Map showing the extent of the Albertine Rift. Forested protected areas are in green, savannahs are in yellow

### 3.1. Biodiversity of the Albertine Rift

The Albertine Rift biodiversity is very rich in vertebrate species and contains more than half of continental Africa's bird species and nearly 40% of its mammal species. There are more endemic mammals, birds and amphibians here than in any other site in continental Africa. The region is also known to have a large number of endemic butterflies. .

The priority sites for conservation in the Albertin Rift were selected and ranked using biodiversity data (species richness and endemic and threatened) and are presented in the table below.

**Table 1** Relative rankings of sites for ‘species richness’ and ‘endemic and threatened’ species. NP=national park, FR= forest reserve

Species richness	Endemic and threatened species		
	High	Medium	Low
<b>High</b>	Virunga NP Itombwe Massif Kahuzi Biega NP Semliki NP Kibale NP Bwindi Impenetrable NP Nyungwe FR Lake Tanganyika	Murchison Falls NP Budongo FR Kalinzu-Maramagambo Queen Elizabeth NP W. Lake Edward	
<b>Medium</b>	Rwenzori Mts NP Kasyoha-Kitomi FR Kibira NP Lakes Edward and George	Lendu plateau Semliki WR Mahale Mts NP Marungu Massif Sumbu NP Mweru-Wantipa NP	Karuma WR Kyambura WR Lake Albert
<b>Low</b>	Echuya FR Mt Kabobo	Bugoma FR Mafuga FR Lake Kivu	Kagombe FR Kitechura FR Matiri FR Itwara FR Idjwi Island Bururi FR Lac Ruzizi NP Gombe Stream NP Mbizi FR

Source: A framework for conservation in the Albertine Rift. 2004-2030

The sites that score highly in the above table are considered to be the most important sites because they rank highly on both species richness and number of endemic and threatened species. The next important sites for conservation are those that rank highly for endemic and threatened species and medium for total species richness. Nyungwe and Kibira landscape is identified as important area for conservation.

### 3.2. Threats to biodiversity in the Arbertine Rift

The Albertine Rift contains some of the highest human population densities on the African continent and all the PAs in this region are under considerable threats. The table below shows the threats to conservation targets in the Arbertine Rift Region. These threats are similar to those of Nyungwe and Kibira Landscape and were generated during the Strategic Framework Planning process.

**Table 2.** A summary of the threats identified for each conservation target in the Albertine Rift eco-region

Conservation targets	Stress	Source(s) of stress
<b>Species Targets</b>		
<ul style="list-style-type: none"> <li>➤ Elephants</li> <li>➤ Gorillas</li> <li>➤ Chimpanzees</li> <li>➤ Crowned eagles</li> <li>➤ Okapis</li> <li>➤ Mahogany</li> <li>➤ Grauer's Rush Warbler</li> <li>➤ Shoebills</li> <li>➤ Afro-alpine Species</li> <li>➤ Wild dogs</li> </ul>	<ul style="list-style-type: none"> <li>➤ Hunting, using guns to poach, loss of connectivity, encroachment</li> <li>➤ Destruction of habitats, stress and disease, hunting</li> <li>➤ Loss of genetic diversity, poaching, hunting,</li> <li>➤ Commercial logging</li> <li>➤ Destruction of habitats,</li> <li>➤ Over exploitation</li> <li>➤ Habitat degradation</li> <li>➤ Wildlife trade</li> <li>➤ Degradation , invasive species</li> <li>➤ Hunting, diseases - domestic dogs</li> </ul>	<ul style="list-style-type: none"> <li>➤ Inefficient agricultural practices, culture/traditions, medicine, trade, limited livelihood sources, habitat fragmentation, human - species contact</li> <li>➤ Illegal occupation of land</li> <li>➤ Limited alternatives /livelihood sources, habitat fragmentation, isolation</li> <li>➤ Lack of income generating alternatives, poor policies</li> <li>➤ Illegal occupation of land</li> <li>➤ Low incomes, high pop. growth, livelihood demand, reduced stock outside PAs</li> <li>➤ Shortage of land, high scale use of forest resources, development needs</li> <li>➤ Political interference, insecurity</li> <li>➤ Climate change, lack of land use plans</li> <li>➤ Inefficient agricultural practices, culture/traditions, medicine, culture, trade, increased human/dog contact</li> </ul>
<b>Habitat targets</b>		
<ul style="list-style-type: none"> <li>➤ Forests</li> <li>➤ Grasslands</li> <li>➤ High Altitude swamps</li> <li>➤ Hot Springs</li> <li>➤ Hydrological systems</li> <li>➤ Lakes and Lakeshores</li> <li>➤ Landscapes</li> <li>➤ Migratory areas for birds</li> <li>➤ Montane grassland</li> <li>➤ Savannah</li> <li>➤ Water Catchment areas</li> <li>➤ Wetlands</li> <li>➤ Woodlands</li> </ul>	<ul style="list-style-type: none"> <li>➤ Over harvesting, diseases, fires, cutting of wood for construction and fuel, commercial logging,</li> <li>➤ Encroachment, conversion to agriculture</li> <li>➤ Encroachment</li> <li>➤ Disruption of water flow</li> <li>➤ Tourism infrastructure</li> <li>➤ Brick making, illicit extraction of minerals</li> <li>➤ Pollution, Soil Erosion</li> <li>➤ Pollution</li> <li>➤ Deforestation, habitat destruction</li> <li>➤ Fire damage</li> <li>➤ Encroachment, deforestation</li> <li>➤ Drainage, cultivation,</li> <li>➤ Charcoal burning</li> </ul>	<ul style="list-style-type: none"> <li>➤ Low incomes, Human populations growth , climate change, high livelihood demand, reduced stock outside protected areas</li> <li>➤ High Pop. density, limited agriculture land, food, poor enforcement mechanisms,</li> <li>➤ High demand for land, lack of livelihood alternatives, limited conservation skills</li> <li>➤ Dam building</li> <li>➤ Tourism</li> <li>➤ Population pressure</li> <li>➤ Mining/oil extraction, limited conservation skills/technologies</li> <li>➤ Limited conservation skills/technologies</li> <li>➤ Limited arable land,</li> <li>➤ Hunting (honey, spread from gardens), ineffective law enforcement</li> <li>➤ Limited arable land,</li> <li>➤ Limited arable land, agriculture, inadequate alternatives</li> <li>➤ Lack of land use plans</li> </ul>
<b>Process Targets</b>		
<ul style="list-style-type: none"> <li>➤ Biomass productivity</li> <li>➤ Hydrological Function</li> <li>➤ Migration of Species</li> <li>➤ Volcanic succession</li> </ul>	<ul style="list-style-type: none"> <li>➤ Tourism infrastructure, resettlement of refuges</li> <li>➤ Disruption of water flow</li> <li>➤ Commercial logging</li> <li>➤ Agricultural conservation</li> </ul>	<ul style="list-style-type: none"> <li>➤ Tourism</li> <li>➤ Lack of livelihood alternatives, dam building on semliki</li> <li>➤ Lack of income generating alternatives, poor policies</li> <li>➤ Fire, displacement and resettlement</li> </ul>

Source: A framework for conservation in the Albertin Rift. 2004-2030

### 3.3. The planning process in the AR

Because of its unique biodiversity, the Albertine Rift has attracted a lot of interest by the governments and conservation organisations. This has resulted in a relatively large network of Protected Areas, managed by different governmental institutions, and various NGOs working in the Albertine Rift Region. Most of the initiatives implemented have limited coordination and cooperation as well as little exchange of information among them, leading towards very limited synergy if not duplication or even counter-productive efforts.

In response to the problem, a process initiated and supported by the John D. and Catherine T. MacArthur Foundation, a Chicago based NGO, has been implemented from 2001 to bring together the NGOs, protected area authorities and the government ministries to develop a strategic framework for conservation and joint planning for protected areas. The MacArthur Foundation facilitated a meeting in February 2001 to start the process of developing a strategic framework for conservation of the Albertine Rift Region.

A ‘steering group’ was elected and was tasked to work on the development of the strategic framework. The group members are: Albertine Rift Conservation Society (ARCOS), Dian Fossey Gorilla Fund International (DFGFI), Institute for Tropical Forest Conservation (ITFC), International Gorilla Conservation Programme (IGCP), Makerere University Institute for Natural Resources (MUIENR), Wildlife Conservation Society (WCS), and World Wildlife Fund for Nature (WWF). Following a three years period of planning and consultations, involving protected areas authorities, representatives of government institutions and international and national NGOs, a strategic framework, termed as “A framework for conservation in the Albertine Rift, 2004-2030” was produced that defined the vision, Goal and strategic objectives.

The Steering Group was initially identified to develop the Strategic Framework for the Albertine Rift and to help develop the process of planning at the planning unit scale. However, since the Steering Group cannot carry out all aspects of the implementation of the strategic framework plan, it was recommended that all the stakeholders will be involved in this process at the planning unit scale and will carry out the responsibilities to implement the plan. The Protected Area authorities will retain the authority for implementing any activities within protected areas and will coordinate their activities and stakeholders programmes at the landscape level.

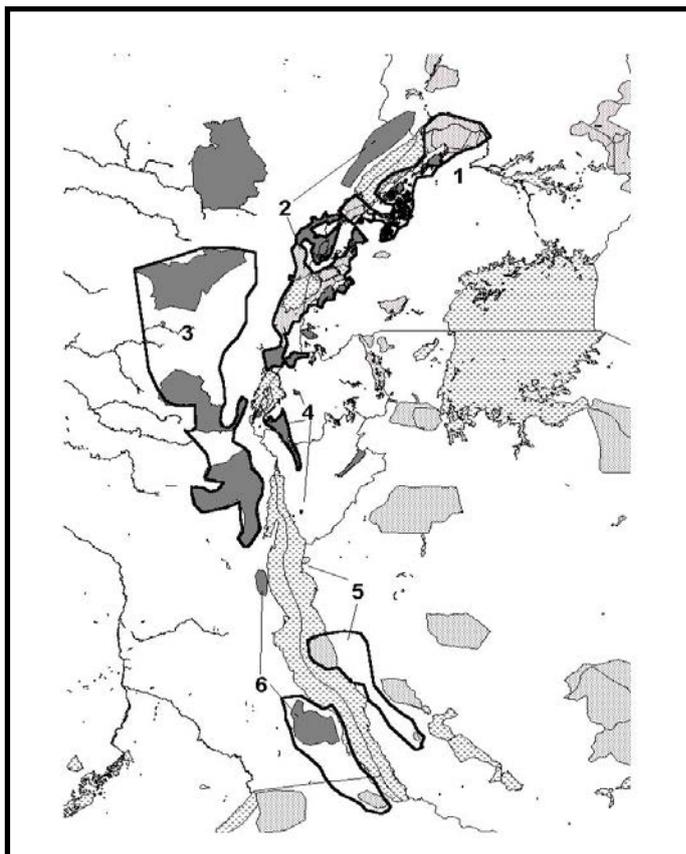
#### Planning Units

Several protected areas in the region are contiguous with each other or linked across the international boundary to protected areas on the other side and this is the case for the Kibira and Nyungwe National Parks. It was recognized during the planning process that there is a need for regional management plans that complement the protected area management plans.

The strategic framework meeting identified and adopted 6 management planning units within the Albertine Rift where more detailed regional plans would be made to harmonise the activities of all the stakeholders involved in conserving these areas (Figure 2):

1. **Murchison falls-Toro-Semliki Wildlife Reserve.** This planning unit links Murchison Falls national park through Budongo and Bugoma Forest Reserves down through Kagombe, Kitechura, Muhangi, Itwara forests to the Toro-Semliki wildlife Reserve. It is confined to Uganda but there is a need for coordinated planning

- between Uganda wildlife Authority and the Forest Department as well as a need to work with private landowners to maintain forest on their land. .
2. **Greater Virunga Landscape.** This set of connected protected areas includes the Virunga park in DRC and all contiguous protected areas in Uganda (Mgahinga gorilla, Bwindi impenetrable, Queen Elizabeth, Rwenzori, Semuliki, and Kibale National parks, Kasyoha-kitomi and Kalinzu Forest Reserves, Kyambura and Kigezi Wildlife Reserves) and Rwanda (Volcanoes national park). ORTPN, ICCN and UWA and many NGOs were involved in the development of the Transfrontier Strategic Plan that was finalized in 2006 with the facilitation of IGCP.
  3. **Maiko-Itombwe landscape.** This planning unit includes the Maiko and Kahuzi Biega national parks, Tayna Community reserve and the Itombwe massif.
  4. **Nyungwe-Kibira.** Nyungwe park in Rwanda and Kibira park in Burundi are part of the same ecosystem and the development of transboundary collaboration and harmonized management plan has been discussed by ORTPN and INECN with the facilitation of WCS. The development of the present plan is the result of those efforts.
  5. **Mahale-Southern Highlands.** This planning unit includes Mahale Mountains and Gombe Stream National parks as well as several forest reserves along Lake Tanganika and unprotected land. At present this region is still relatively wild and intact.
  6. **Marungu-Sumbu landscape.** Including the Marungu massif and Mt Kabobo in DRC and Sumbu and Mweru-Wantipa parks in Zambia, this planning unit is the least known of all the six.



**Figure 2.** The six management planning units as defined in the 2004-30 Framework for Conservation in the Albertine Rift.

The experience of IGCP has been very successful in working with the protected area authorities to encourage coordination and joint management between Uganda, Rwanda and DRC in the Virunga Volcanoes and Bwindi Impenetrable National parks. IGCP facilitated the development of a 10 years

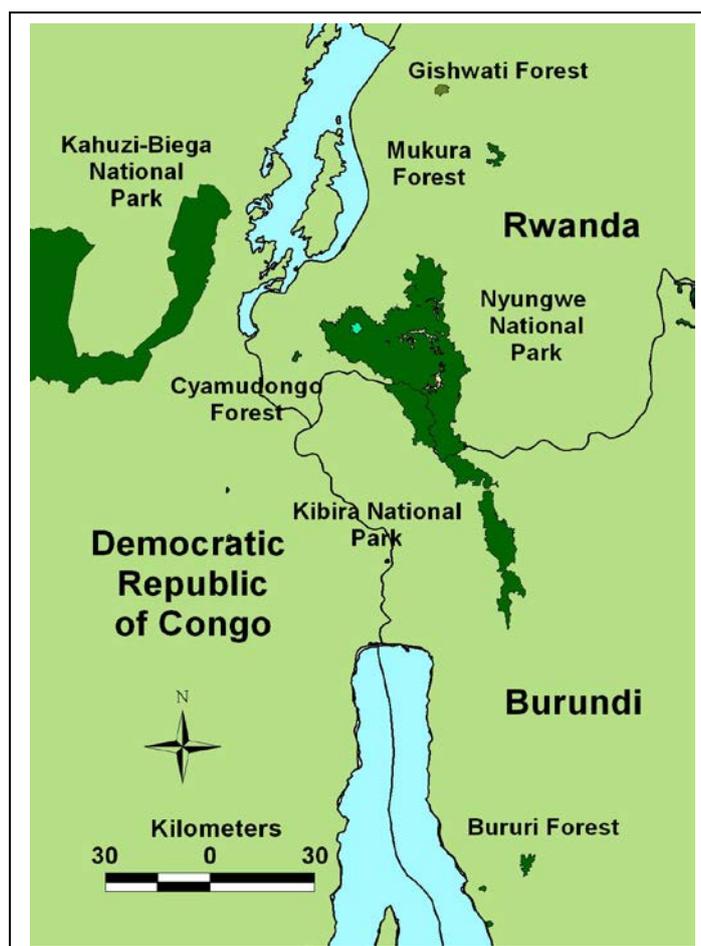
Transboundary Strategic Plan in 2006 for the ‘Greater Virunga Landscape’, one of the planning unit . The IGCP experience has served as a model further north with support from WCS to include all the contiguous protected areas linked to the Virunga National Park. The model will serve as a reference in the case of Nyungwe-Kibira transboundary collaboration because one of the two partners (Rwanda) is already involved in the Central Albertin Rift transboundary collaboration experience.

#### 4. THE NYUNGWE-KIBIRA TBNRM PROCESS

##### 4.1. Profile of Nyungwe-Kibira Landscape (Figure 2)

The area encompasses two important PAs in the central part of the Albertine Rift namely Nyungwe and Kibira National Parks. Kibira (Burundi) and Nyungwe (Rwanda) National Parks are contiguous forming the largest protected forest block (141,300 ha with resp. ...) remaining in East Africa. While Nyungwe National Park is the largest protected area in Rwanda, Kibira National Park holds the largest mountainous forest ecosystem under protection in Burundi.

This transboundary ecosystem is invaluable both locally and internationally. Biodiversity is unique with many endemic species. Its conservation value has been recognized by many international organizations namely Conservation International (CI), the World Wide Fund for Nature (WWF), the Wildlife Conservation Society (WCS) and MacArthur Foundation (Chicago, USA).



**Figure 3.** The Congo-Nile Divide showing the Nyungwe and Kibira transboundary protected area (Rwanda and Burundi).

#### 4.1.1. Nyungwe National Park

Nyungwe National Park (NNP) has been created in 2005, primarily to protect a natural resource that is widely recognized as being of global as well as national significance. When it was originally designated as a forest reserve in 1933, its total area was 1,141 km<sup>2</sup>; encroachment by local farmers between 1958 and 1979 reduced the reserve area to 971 km<sup>2</sup>. Today, partially buffered by forest plantations and tea estates around some of its borders, and with the addition of the remnant forest of Cyamudongo, it covers slightly more than 1,000 km<sup>2</sup>. The forests at Nyungwe are interrupted by two large permanent swamps, Kamiranzovu and Uwasenkoko. Kamiranzovu swamp (its name means “swallows elephants”), which covers approximately 13 km<sup>2</sup>, is one of the largest peat bodies in Africa. With the destruction of Gishwati and Mukura Forest Reserves, NNP, together with the Volcanoes National Park are the only two remaining afro-montane components of Rwanda’s protected area system.

NNP is important for conservation of several restricted-range species that are found only in the Albertine Rift ecoregion in Africa. It is home to 26 Albertine Rift endemic birds, more than any other protected area in the region; only the unprotected Itombwe Mountains contain more endemic species. NNP also contains 13 species of primate, including the owl-faced monkey (*Cercopithecus hamlynii*, Classified by IUCN as vulnerable) and l’Hoest’s monkey (*C. lhoesti*), both restricted-range species. The black and white colobus (*Colobus angolensis*) groups in Nyungwe are unusually large, ranging up to 450 individuals — larger than any other groups recorded for this species. Eastern chimpanzees (*Pan troglodytes schweinfurthii*), an endangered species, occur in Nyungwe.

Within the past two years, an outlying remnant of the Nyungwe forest at Cyamudongo was added to the Park. It is home to a group of about 200 chimpanzees as well as other small mammals and birds. This remnant is only about 20 km<sup>2</sup> but is relatively intact.

Within its altitudinal range of 1,600 to 2,900 meters, NNP is home to 1,068 recorded plant species, of which about 250 are endemic to the Albertine Rift. There are more than 200 different tree species. Among the fauna, 85 mammal, 278 bird, 32 amphibian, and 38 reptile species have been recorded in Nyungwe; of these, 62 species are endemic to the Albertine Rift. A comparison with the Albertine Rift shows that for all taxa NNP ranks consistently high. It has more endemic species than any other rift forest that has been surveyed (about 60 percent). Thus, Nyungwe is considered a critical area for conservation of restricted-range species not only by the GoR but also by the international conservation community.

NNP’s socioeconomic importance is as significant as its biological importance. Nyungwe is the watershed for over 70 percent of Rwanda; its streams feed both the Congo and the Nile basins. It thus protects a major watershed not just for surrounding communities but also for communities much further downstream. Population densities around Nyungwe are among the highest in Africa (250-500/ km<sup>2</sup>), but the forest’s tempering effect results in longer periods of rain each year, supporting a relatively high degree of agricultural production.

The buffer zone around the forest has been planted with a variety of species (*Pinus patula*, *Cupressus lusitanica*, and *Acacia melanoxylon*) and is a source of building poles and firewood for local populations. Local herbalists harvest medicinal plants in the forest and a new ORTPN program allows herbalists to harvest wildings from the forest to plant on their own land. Beekeeping associations place hives at the edge of the forest because the honey produced there is of superior quality. Tourism in Nyungwe generates a growing amount of

direct revenue for the national park system but probably has a greater importance to the tourist industry as part of a regional tourism circuit.

#### **4.1.2. Kibira National Park**

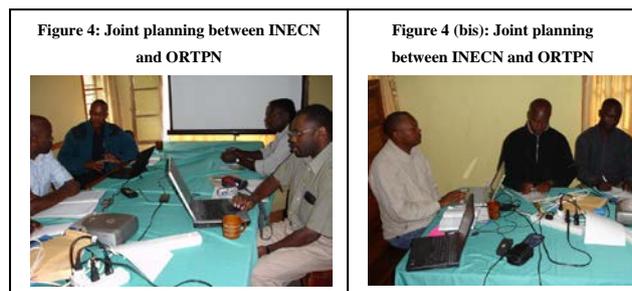
Located in north-western Burundi, Kibira National Park lies along the north-south-oriented mountains of Congo-Nile divide. It extends from the border with Rwanda almost as far south as the town of Muramvya. Most of the remaining primary forest is found on the wetter, western mountain slopes. It is estimated that not more than 16% consists of primary evergreen forest. Dominant tree species include *Symphonia globulifera*, *Newtonia buchananii*, *Albizia gummifera* and *Entandrophragma excelsum*. There are also areas of montane bog and bamboo, *Arundinaria alpina*. Annual rainfall varies from 1,400 mm to 2,000 mm.

The forest holds many of the Albertine Rift endemics. In addition, five species of the Guinea-Congo Forests biome occur while a further two, *Trachyphonus purpuratus* and *Illadopsis fulvescens*, used to do so, but are now thought to be locally extinct. One species each of the Lake Victoria Basin and Zambezian biomes have also been recorded. Kibira has been legally protected since 1933, while active conservation effort, as elsewhere in Burundi, dates from 1980. Historically, the forest was used as royal hunting and burial grounds and some areas of Kibira retain almost magical qualities to local people and remain out of bounds. Despite this and its status as a National Park, there is much pressure on parts of the forest as a result of felling of trees and cutting of bamboo, fire and poaching, etc. Insecurity has been reported in various sectors of the PA

#### **4.2. The Transboundary planning process in Nyungwe and Kibira**

From the CAR Albertin Rift TBNRM experience, the transboundary collaboration approach was initiated in the Kibira- Nyungwe sector from 2005 with the facilitation of WCS. In 2006, technical staff from the two institutions (ORTPN and INECN) met in Gisakura to discuss key areas of collaboration for the management of the Nyungwe-Kibira landscape. The participants recognised the importance of the regional collaboration and confirmed their interest to engage in joint conservation initiatives including:

- Development and ratification of a Transboundary collaboration protocol between ORTPN and INECN
- Biodiversity survey of Kibira National Park
- Capacity building (joint training, joint study tours, RBM initiated at KNP)
- Habitat monitoring (joint patrols when security and working condition permit)
- Transboundary collaboration meetings(planning, evaluation, etc)(quarterly)
- Support communication between PA managers, local authorities, military etc
- Minor rehabilitation of KNP head office and field equipment of the KNP
- Chimpanzee habitat management and conservation action plan
- Community enterprise development around KNP
- Regional tourism master plan
- Identify and contact the potential partner institutions
- Development of tourism infrastructures- trails in Kibira etc
- Development of a Management Plan for KNP



From that meeting, some recommended activities were implemented; (1) better monitoring of the bamboo, a preferable habitat for the endangered Owl faced by organizing joint patrols and sensitization programme in the two countries, (2) rehabilitation of KNP infrastructure and equipment, (3) chimpanzee programme survey , (4) study tours and exchange of

experience etc..

In 2008, the regional collaboration process between Nyungwe and Kibira made a remarkable progress with the signature of the MOU with the following objectives:

The objectives of the transboundary collaboration in the Kibira-Nyungwe landscape are as follows:

- a. Cooperation in the conservation of biodiversity, natural resources and associated cultural values, in the research, monitoring and ecotourism for both parks in the two countries;
- b. Promotion landscape conservation through planning and better management of the two protected areas ;
- c. Lobby for planning, sustainable use and management of natural resources in the transboundary region in order to reduce the threats affecting these protected areas ;
- d. Improvement of trust, understanding and cooperation between the two parties, and other players for the sustainable conservation and peace in the region ;
- e. Working together to enhance and share, experience and good practices in the area of management and research, ecological monitoring, for a sound and effective management of biodiversity and cultural values ;
- f. Promotion of the advantages derived from conservation and sensitization for benefit sharing at the national and international level;
- g. Improvement of understanding of the importance of conservation within partners and the general public;
- h. Promotion of biodiversity conservation aiming at reducing poverty and conflict resolution in the region.

### 4.3. The TSP development plan

Article 3 of the MoU signed by the two institutions recommends the creation of a Core Secretariat (CS) to facilitate the transboundary regional collaboration. The members of the CS are comprised of the Director Generals of ORTPN and INECN and technical staff from the two institutions. The key mandate of the core secretariat includes the development of the TSP. The development of the TSP was therefore recommended by the two institutions and will guide the Kibira-Nyungwe transboundary collaboration in the future.

The development of the Kibira-Nyungwe strategic plan involved the two institutions (RDB T&C and INECN) and other partners (local authorities, Army, local populations, NGOs...) working in the region. The literature review on the existing information on the Nyungwe Kibira region and transboundary collaboration initiative was done. We treated/analysed the existing transboundary collaboration initiative in the CAR with interest because the MoUs defines the same objectives for the two areas, the region represents the same similarities (endangered/threatened species and threats) but also it involves one members out of two (Rwanda) in this initiative.

#### 4.4. Situation Analysis



**Figure 5:** The Transboundary Planning Meeting in Kayanza, July 2009

In the planning process, a meeting involving the two parties was organised to discuss the situation of the Nyungwe Kibira Landscape. A SWOT Analysis method was used and the results of the analysis is presented in the table below:

**Table 3.** SWOT Analysis for Nyungwe – Kibira Landscape

<b>Strength</b>	<b>Weaknesses</b>	<b>Opportunities</b>	<b>Threats</b>
<p>1. The legal status of Nyungwe Kibira exist, parks created through act of law</p> <p>2. Commitment for collaboration by both Rwanda and Burundi through the signed MoU</p> <p>3. Same language, same culture ease the communication and facilitate the good transboundary management</p> <p>4. Duty to collaborate between the two countries thanks to the regional cooperation agreements signed by the two countries</p> <p>5. The two forests are ecologically similar, which facilitate similar ecological interventions and exchange of the management experiences</p> <p>6. Many partners effectively involved and committed from the Rwanda side</p> <p>7. Neighbouring communities have similar livelihood modes around the Nyungwe Kibira Landscape</p> <p>8. High biodiversity richness in both parks</p> <p>9. Staff and Managers of the two PAAs are motivated</p> <p>10. Presence of Environmental Police in Burundi (however controversial – different views among the participants ???)</p>	<p>1. Different organisational structures in the two institutions</p> <p>2. Weak capacity for human resources in conservation matters especially in Burundi</p> <p>3. Human resources insufficient in both countries</p> <p>4. Protection system by both guards and environment police which are managed by two different institutions and leading to management conflicts in Burundi</p> <p>5. Different patrol systems, such inexistence of patrol posts and camping centres in Burundi</p> <p>6. insufficient financial capacity, transport, and different incentives mechanisms</p> <p>7. Un-harmonised laws for park protection</p> <p>8. Discrepancies in the knowledge about the biodiversity</p> <p>9. Line ministries of RDB T&amp;C and INECN different and might bring different management orientations</p> <p>10. Weak community involvement in the management</p>	<p>1. Security is back in both countries</p> <p>2. The two countries are part of the same conventions and regional &amp; international organisations (EAC, COMESA) which support transboundary collaboration</p> <p>3. Same partners (WCS) supports both institutions</p> <p>4. Possibility to create a regional tourism circuit</p> <p>5. Existence of a Strategic Plan for the whole Albertin Rift</p> <p>6. The concept of transboundary collaboration highly supported by the regional as well as international opinion, which could help attract funding</p> <p>7. Experience of the Transboundary collaboration of the CAR</p> <p>8. Political will</p> <p>9. Good will of the partners involved in conservation</p> <p>10. Similar and continuum of the ecosystem across the border with similar physical features</p> <p>11. Implication of the civil society and media in conservation</p>	<p>1. Weak involvement of different institutions and partners</p> <p>2. Poverty and demographic pressure of the local population around the park who live essentially from agriculture and wild resources in both countries</p> <p>3. Both countries are in the region characterised by political instability</p> <p>4. Existence of agricultural institutions right inside the Kibira</p> <p>5. presence of mining resources inside the two parks</p> <p>6. Insufficiency of fire and art wood around the PAs</p> <p>7. Poaching</p> <p>8. Wild fires</p>

<b>Strength</b>	<b>Weaknesses</b>	<b>Opportunities</b>	<b>Threats</b>
	<p>of the park</p> <p>11. weak collaboration between institutions and inadequate coordination</p> <p>12. weakness in law enforcement and situation of impunity</p> <p>13. Financial resources insufficient</p> <p>14. Low level of the sensitisation regarding environment protection among the authorities</p> <p>15. Insufficient communication and information exchange both internally and across the border</p> <p>16. Insufficient and inadequate infrastructures (in bad shape) especially in Burundi (like roads, Sign posts, tourist facilities...)</p>	<p>12. Possibility to benefit from the positive experiences in conservation from Rwanda</p>	

---

The Nyungwe Kibira transboundary collaboration has many areas of strength that will support the process. Those include the legal status of the two parks and the existence of conservation institutions, the engagement of the two governments to collaborate, communication, culture and the same socio-economic environment etc,.. The peace development in the two countries after many years of conflict in the region and the interest of donors and other partners in supporting transboundary collaboration represent key opportunities to the transboundary collaboration process. However, it's also important to recognise many challenges to the Kibira-Nyungwe transboundary collaboration process. The institution capacity to manage the PAs is weak, especially in Burundi, poverty and high dependence of local population on natural resources in the two countries and lack of coordination between different stakeholders engaged in natural resource management. The financial support to conservation is very low and because of many years of conflict and war in the region the two protected areas have been degraded in some areas and need to be restored.

The N-K transboundary collaboration can certainly help in addressing many of the conservation problems in the region and will build on the identified strengths and explore the existing opportunities in the region.

## PART B: The Plan

### 5. THE PLAN PURPOSE

The MoU signed between the two PAAs in September 2008 elucidates the objectives behind the TB collaboration for Nyungwe – Kibira Landscape as given below:

- (1) Cooperation in the conservation of biodiversity, natural resources and associated cultural values, in the research, monitoring and ecotourism for both parks in the two countries;
- (2) Promotion landscape conservation through planning and better management of the two protected areas ;
- (3) Lobby for planning, sustainable use and management of natural resources in the transboundary region in order to reduce the threats affecting these protected areas ;
- (4) Improvement of trust, understanding and cooperation between the two parties, and other players for the sustainable conservation and peace in the region ;
- (5) Working together to enhance and share, experience and good practices in the area of management and research, ecological monitoring, for a sound and effective management of biodiversity and cultural values ;
- (6) Promotion of the advantages derived from conservation and sensitization for benefit sharing at the national and international level;
- (7) Improvement of understanding of the importance of conservation within partners and the general public;
- (8) Promotion of biodiversity conservation aiming at reducing poverty and conflict resolution in the region.

During the planning process, the vision, goals and key results areas of the plan were defined:

The 30 year Vision is:

*The integrity of Nyungwe-Kibira Ecosystem is restored; its ecological, economic and social values are recognised and accessible for the sustainable development at local, national and global levels*

Through this collaboration, the two PAAs will aim to achieve the following goal (10 year horizon):

*The transboundary collaboration mechanisms are established, and operational for an integrated management of the Nyungwe-Kibira Ecosystem*

### 6. STRATEGIC OBJECTIVES (SO)

The strategic objectives are strength of the strategic plan. They give direction to the plan. They highlight the intention over the period of the strategic plan. This part of the plan therefore gives guidance for operational planning and act as monitoring progress and evaluating performance.

## **6.1 SO 1. Policies and laws are in place and harmonized for the sustainable development and conservation of the landscape Kibira-Nyungwe.**

Rwanda and Burundi have signed and/ or ratified a number of international conventions and protocols and agreements related to environment that can support transboundary collaboration. The two countries are also part on the regional organisations that support transboundary natural resources management (East Africa Community, NEPAD, Nile basin Initiative, CEPGL...). The article 9 of the East Africa Community Protocol on environment and natural resource management states that the partner states shall “(1) develop mechanisms to ensure sustainable utilization of the transboundary ecosystems and (2) jointly develop and adopt harmonized policies and strategies for the sustainable management of transboundary natural resources”. Environmental governance and sustainability is one of the priorities in the national programmes of the two countries; the EDPRS and PRSPs respectively in Rwanda and Burundi recognise that addressing environmental problems is a key priority to reduce poverty and to achieve the sustainable development of the two countries. For the management of the Nyungwe Kibira TBNRM, it is important to identify gaps and areas where it is required to have new policies and harmonize existing ones where it’s appropriate. For example during the discussion in the planning process, it has appeared that the policy on Revenue Sharing adopted in Rwanda needs to be harmonized across the region in order to have the same interest and understanding of the importance of conservation in the two countries. This will also extend to the harmonisation of policies and regulations pertaining to the security and law enforcement mechanisms in order to foster the required collaboration environment to curb down the illegal activities across the two parks.

Key strategies include:

S.1.1. Carry out a consultancy / study of the policy and legal system for harmonisation between the two countries

Key activities:

1. Identify key policies that can better facilitate the transboundary collaboration
2. Advocate and initiate legislative changes at national level to include new or harmonize existing policies to support transboundary collaboration
3. Increase public awareness at regional level about the new adopted policies
4. Formalize the process and increase the political support to the TB collaboration.
5. Set up collaborative mechanisms between the security and law enforcement organs in order to strengthen the security across the landscape Nyungwe-Kibira

## **6.2. SO 2. Capacity to manage the N-K TB for institutions and others stakeholders is enhanced.**

Pressures on natural resources and the environment are enormous in the Nyungwe-Kibira landscape because of poverty and the lack of alternatives for many people and the long period of insecurity in the region. Building capacity to promote sustainable use and benefit sharing is critical to the sustainability of ecological functions and the conservation of the two contiguous protected areas. In the planning process, the capacity building aspect was defined as a key area that requires much investment for the N-K Transboundary collaboration.

Capacity can be defined as the ability to solve problems, to set and achieve objectives and perform functions. *Capacity development or building* is the process of transformation or

change by which individuals, institutions, and societies develop their abilities, both individually and collectively, to perform functions, solve problems, and set and achieve their defined goals. Capacity building concept is used in many ways and can cover different aspects for an organisation. The key areas for capacity building are:

- Organisation structure: Are the organisations structures for the different stakeholders and mainly ORTPN/RDB and INECN ready to support N-K transboundary collaboration?
- Staffing levels and Number
- Staff knowledge, skills and motivation
- Resources required to undertake duties on an effective way

Capacity building can also be related to the creation of an enabling environment through sound legal and policy frameworks. This includes the inter-relationship among different organisations in terms of flows of resources, coordination and sharing information.

Key strategies:

S.2.1 Align the Institutional structures of INECN and RDB/ORTPN to facilitate the TB collaboration.

Key Activities:

1. Identify areas for alignment for the two institutions
2. Initiate institutional programme review where appropriate
3. Adopt the institutional programme review
4. Increase the public awareness about the new changes.

S.2.2 Coordinated planning and monitoring of the N-K landscape

Key activities

1. Develop and review regularly the regional management plan
2. Develop and implement TB operational plans
3. Contribute to the development and review of the Nyungwe and Kibira Management Plans and ensure that they are well harmonized with the TB Plan
4. Establish and manage a regional information system
5. Sharing existing resources in the planning process.

S.2.3 Capacity of PA staff and others stakeholders is enhanced

Key activities

1. Identify capacity need assessment and develop a capacity building plan for the N-K landscape
2. Implement a capacity building plan and develop a mechanism for sharing regional resources, management skills and good experiences.
3. Establish an harmonized policy for staff recruitment and motivation
4. Develop a monitoring and Evaluation plan, including indicators of staff performance.

S. 2.4. Management oriented research aimed at sustainable conservation of biodiversity in the Nyungwe-Kibira landscape undertaken

Key activities:

1. Develop a regional research plan with research priorities
2. Undertake key priority management oriented researches

### 6.3. SO 3. The ecological, economic and social values of the Nyungwe-Kibira landscape are well understood.

The Nyungwe and Kibira protected areas are managed mainly for biodiversity purposes even if they also deliver important flow of ecosystem goods and services (such as watershed protection, climate regulation, pollination and scenic beauty...). It is important to recognise that rural livelihood for the majority of the population in the region rely on the natural resources (agriculture, collection of drinking water, collection of forest products). The Nyungwe-Kibira forests contribute also largely to the maintenance of the primary industry based on coffee and tea production in the two countries through the provision of hydropower and climate regulation at local and regional level.



Unfortunately, the benefits associated with the conservation of the protected areas are not accounted for or at best are much underestimated. Many are still seeing the two protected areas as a source of land production through exploitation of forest resources, land conversion and mining.

The ecological, social and economic functions are the most recognised during disastrous periods such as flooding, droughts or loss of power due to siltation.

**Figure 6.** Retention Dam, which provides water flow to enable the functioning of the Rwegura Power Plant. The picture illustrates the alarming reduction of water level in the Dam.

The MDGs adopted by the UN clarified the interrelations between biodiversity, ecosystem services and the goal of achieving sustainable development. The MDG1 clearly states that “Eradicating hunger depends on sustainable and productive agriculture, which in turn relies on conserving and maintaining agricultural soils, water, genetic resources and ecological processes”.

In his examination of Nyungwe’s economic value, Masozera points out the value of other services that also benefit Rwandans more directly. Table 4 gives key findings of his study.

**Table 4.** Total economic value of Nyungwe watershed

Ecosystem services	Economic Value (\$US/year)	Beneficiaries
Watershed protection	117,757,583	Local communities, OCIR THE, Electrogaz, Regideso/Burundi
Biodiversity protection	2,000,000	Global community
Carbon sequestration and storage	162,080,000	Global community
Recreation and tourism	3,372,313	Global community, ORTPN and tour operators
<b>Total</b>	<b>285,209,896</b>	

*Source:* Masozera, 2008.

Without a comprehensive understanding of the true value of the Nyungwe- Kibira protected resources, it will be difficult to protect them and to achieve the millennium development goals.

Key strategies

#### S.3.1. Assessment and marketing of the ecological, economic and social values of Nyungwe-Kibira Landscape

Key activities:

1. Assess the value of ecosystem services and their beneficiaries
2. Create awareness about the importance of ecological, economic and social values of the N-K PAs at local, national, regional and international levels
3. Initiate approaches for Payment for Ecosystem Services (PES).

#### **6.4. SO 4. Attitude and behaviour of stakeholders have changed because of the good understanding of the value and importance of the Nyungwe-Kibira landscape.**

People can cause destruction because they are ignorant, they can change their attitude and behavior if they have more knowledge. Ignorance and poverty are cited as the main reasons for environment degradation in the region. Conservationists can also learn from the local people and can then build new concepts and ideas on how to better manage the natural resources and respond to community needs. Because PAs are neither closed systems nor isolated islands, the attitudes and behavior of stakeholders towards protected areas will change through working on different aspects including:

- **Awareness:** Helping individuals and social groups acquire an awareness of, and sensitivity towards conservation and its related problems
- **Attitude:** Helping individuals and social groups acquire a set of values and feelings of conservation issues, thus be motivated for active participation.
- **Skills:** Helping social groups and individuals acquire skills for identifying and solving conservation and environmental problems
- **Participation:** an opportunity to be actively involved at all levels in working towards resolution of conservation problems and addressing related socio-economic issues.

Key strategies

#### S.4.1: Positive attitude towards N-K Protected landscape encouraged.

Activities

1. Increase a better understanding of the objectives and importance of N-K conservation landscape among different stakeholders.
2. Improve and harmonize sensitisation programmes tailored to different social groups and categories.

#### S.4.2. Acceptance of the PA as an important resource to be managed by different partners including local community

Key activities:

1. Improve and harmonize sensitization programmes

2. Involve local communities in the management of PAs
3. Develop and harmonize incentives for communities to sustainably manage the PAs

### **6.5. SO 5. Conservation of the Nyungwe-Kibira landscape contributes to the human welfare at local, regional and international levels.**

High human population density, high levels of poverty and intense farming characterise the region. Community livelihoods in the N-K landscape depend largely on natural resources. Local communities living in the surrounding of the two protected areas continue to see them as source of forests products (fire woods, poles, bamboo) and land for agriculture or mining. The PAs have been encroached in many areas and degraded in other places. The participation of local community in the management of the PAs is important and it will require that conservation benefits have to reach local community. The conservation problems in the region are mainly related to human actions.

The realization that wildlife makes significant contribution to economic development hasn't yet taken root among the community surrounding the Nyungwe Kibira Landscape. One of the ways this contribution is realized is through tourism. Not only can this tourism revenue contribute to the national and local economies but also is required to contribute to financial sustainability of the parks. The tourism industry creates employment, opportunities in both rural and urban areas, thereby reducing pressure on wildlife resources.

#### Key strategies and activities

##### S.5.1 Natural resource based economic development promoted to support conservation efforts and contribute to the welfare of local, regional and international community,

#### Key Activities

1. Assess the existing and potential economic benefits of the N-K protected areas
2. Review resource access policies and explore areas of harmonization at regional level
3. Identify opportunities for and support private sector led wildlife enterprise development (market development, farming, wildlife ranching...)
4. Promote reforestation programme in the region to ensure sustainable forest production.
5. Initiate Payment of Ecosystem Services programmes (carbon sequestration, hydropower production...).

##### S.5.2: Sustainable economic development of the natural resource based tourism enhanced

#### Key activities:

1. Develop a regional tourism plan that covers infrastructure development, marketing and visitor services.
2. Link different destinations and coordinate the movements of tourists in the region (visa aspects, transport...).
3. Harmonise visitor charges for common tourism products and visitor handling standards.

##### S.5.3. Required infrastructure for tourism and PA management identified and developed

**Key activities:**

1. Carry out an infrastructure capacity development needs assessment for the Nyungwe and Kibira.
2. Develop fundraising proposals; solicit for funding and infrastructure development

#### S.5.4. Local communities participating in and benefiting from natural resource management and other development initiatives

**Key activities:**

1. Involve local communities and local authorities in conservation related planning and development in and around the PAs through the ongoing decentralisations processes
2. Develop incentives for communities to support conservation in the region
3. Harmonize the revenue Sharing Policy across the border.
4. Promote the development of micro-projects for the population surrounding the PAs
5. Develop linkages with development partners and other natural resource management initiatives.

### 6.6. SO 6. Nyungwe -Kibira landscape is restored and well protected

Many illegal activities have occurred in the Kibira Nyungwe landscape (bush fires, human encroachment and agriculture, mining and forest cuts) and those areas need to be restored.



In Nyungwe forest, restoration activities in many affected areas are ongoing and the programme needs to be encouraged across the border. The best way to restore the ecosystems is to ensure good protection of the N-K landscape to allow natural regeneration and restoration of ecosystems and wildlife. The protection and the regular monitoring of the N-K landscape are key areas for this tranfrontier Strategic Plan.

**Figure 7:** Restoration activities in Nyungwe National

**Key strategies**

#### S.6.1. Formal transboundary collaborative law enforcement mechanisms to control illegal activities established in the N-K landscape.

**Key Activities:**

1. Develop and harmonize mechanisms to control and reduce illegal activities in the N-K landscape
2. Develop collaborative mechanisms to address and reduce illegal TB activities
3. Establish collaborative mechanisms with key players (PAAs, police, army, immigration, local authorities...) to better address conservation challenges in the region.

S. 6.2. Connectivity and integrity of core wildlife PAs in the Nyungwe-Kibira Landscape ensured

Key Activities:

1. Assess and map out the wildlife areas requiring connectivity within Nyungwe-Kibira Landscape
2. Work with relevant stakeholders to survey, document and demarcate the PA boundaries
3. Develop and implement programme for rehabilitation of corridors, buffer zones and encroached areas

S.6.3. Degraded areas are well protected and restored in the N-K landscape

Key activities:

1. Identify affected areas and the causes of degradation in the N-K landscape
2. Work with different partners to reduce conservation threats to the degraded areas
3. Develop and adopt restoration mechanisms
4. Adopt and harmonize Monitoring approaches of the N-K landscape

S.6.4. Integrity of PA assured through development of mechanisms for natural disaster management

Key activities

1. Develop a policy for management of potential calamities
2. Set up an early warning system for natural disasters

**6.7. SO 7. Functioning regional collaborative mechanisms are in place.**

TBNRM involves many sectors and partners and covers many objectives; biodiversity conservation, economic integration and development, political and diplomatic objectives. Therefore, partnership is very important in achieving conservation objectives. Key partners in the process involve PAAs, local and national governments, private sector, NGOs, CBOs, international organisations... Functioning regional collaborative mechanisms are key to succeed the N-K transboundary collaboration.

The Article 3 of the MOU recommends the creation of a Core Secretariat (CS) to facilitate the transboundary regional collaboration that comprises of the Executives directors of the RDB/ORTPN and INECN, the relevant technicians of the two institutions and the facilitator (WCS). The transfrontier core secretariat will guide the transboundary collaboration process.

Key strategies

S.7.1. Coordination mechanisms enhanced to contribute towards avoiding conflicts, duplication and wastage of existing resources.

Key activities:

1. Develop regional coordination policy and mechanisms that will guide the implementation of the TSP

2. Set up and support the functioning of the Transboundary Executive Secretariate for Nyungwe – Kibira Landscape
3. Establish functioning regional technical committees to facilitate coordination
4. Establish an enabling environment that will encourage private sector to invest in wildlife conservation

#### S.7.2. Effective communication mechanisms between PAAs and other stakeholders established

##### Key activities:

1. Establish common radio frequency or other communication means (mobile phone, internet..) to enable cross-border communications between the PAs staff
2. Establish mechanisms for communication and sharing information between different stakeholders

### **6.8. SO 8. Long -term sustainable financing mechanisms established**

Long-term sustainable funding to support conservation activities is under the responsibilities of local community, government, NGOs and international community. The governments and international communities have resolved to manage the protected areas through different treaties and conventions (CBD, CITES...) and have the obligations to respect their obligations.

##### Key strategies

#### S.8.1. Explore sustainable financial mechanisms and their applicability

##### Key activities:

1. Develop a regional business and investment plan for N-K landscape.
2. Establish a regional conservation financing mechanism for Nyungwe-Kibira
3. Establish mechanism for regional tourism development in the N-K landscape
4. Establish mechanism for Payments of Ecosystem Services (PES) for N-K landscape

















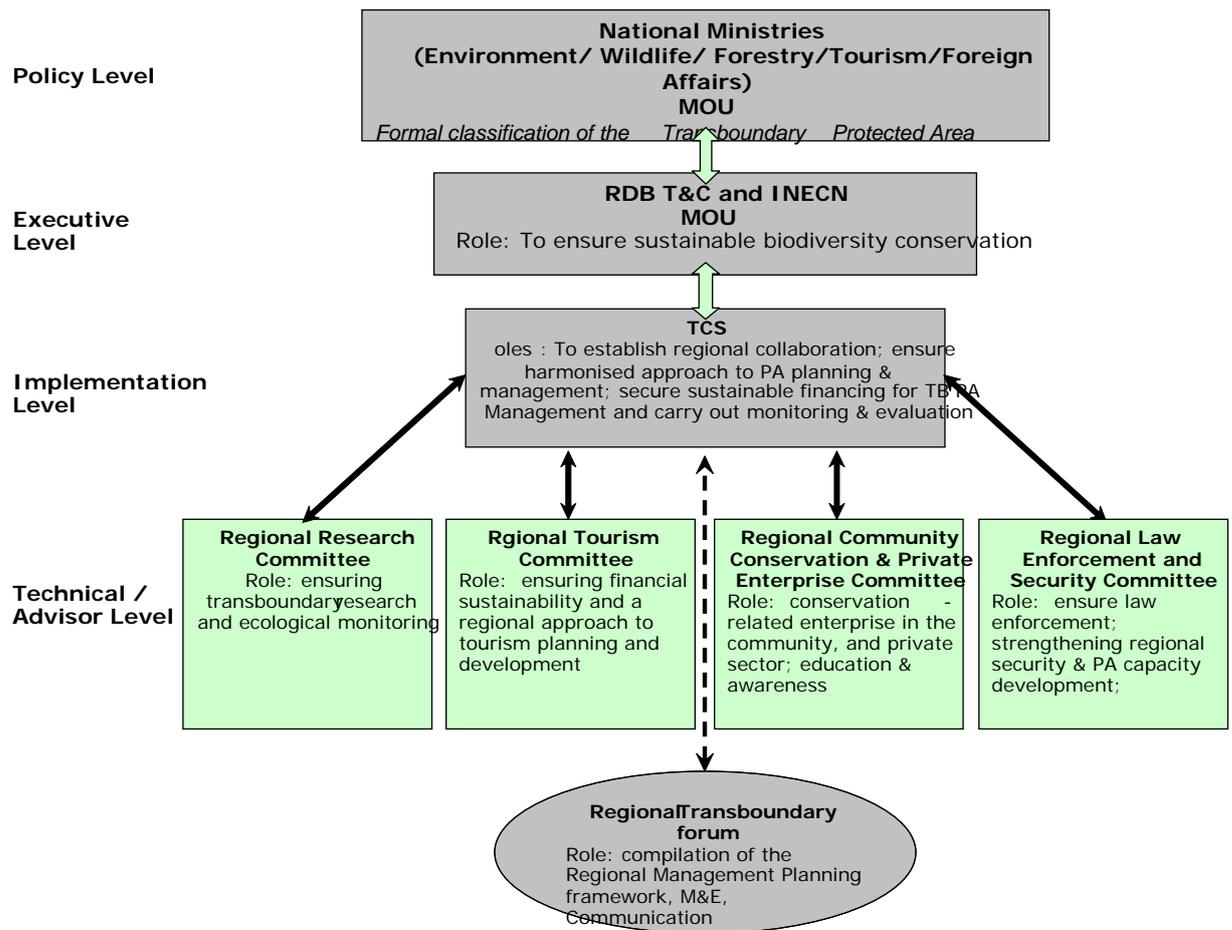
## **7. NYUNGWE-KIBIRA TSP IMPLEMENTATION**

The signed MoU on the transboundary collaboration for Nyungwe – Kibira Landscape implies setting up a Secretariat which will facilitate the implementation of the transboundary collaboration program. During the transboundary meeting which took place in Kayanza, Burundi in July 2009, the participants debated on this issue, as Rwanda is already engaged in another similar transboundary process, the Central Albertine Rift Transboundary Protected Areas Network, bringing together, Democratic Republic of Congo, Uganda and Rwanda. The question was (1) whether the already existing Core Secretariat would open up to include Burundi or (2) whether it would be necessary to set up a new Secretariat for Nyungwe – Kibira Transboundary Collaboration.

Out of this debate, it emerged that the participants recommended to set up a new Secretariat to be established in Bujumbura, which will be independent from the existing one, and which will need first to tackle the current challenges and issues peculiar to Nyungwe -Kibira Landscape. The status of Central Arbertine Rift transboundary collaboration was estimated to be already far advanced ahead, and the issues pertaining to Nyungwe – Kibira Landscape would loose the particular attention that they deserve. The choice for Bujumbura as a venue for this Secretariat was motivated by the major constraints being faced by the Kibira National Park, as the country is just emerging from a decade of war and political instability, anticipating that this will draw the interest and attention of the different national, regional and international partners to the critical situation that the country is currently going through with regards to Conservation and Environmental Management.

### **7.1. Institutional arrangement of the TSP implementation**

Because of sharing experience and learning, the institutional arrangement of the Nyungwe-Kibira TSP implementation will have a comparable structure. It was also agreed that the process may evolve to one transboundary secretariat in two landscapes.



**Figure 8:** Institution Set up and Linkages

Figure ... Adapted from CAR (2008)

### **7.1.1. Transboundary Inter-ministerial Board**

A board composed by representatives from the ministries engaged in Natural resource management (environment, wildlife, lands, water tourism and foreign affairs) in the two countries will be formed. This structure will guide the policy level of the transboundary collaboration, it will ensure that the process is fully supported at political level in the two countries and will be responsible of the formalisation of the TB process. The roles of the inter-ministerial board are:

- Formalization of the transboundary collaboration
- Formulation of regional policies
- Harmonization of national policies

### **7.1.2. Transboundary Core Secretariat**

The Transboundary core secretariat was established by the MoU with the mandate to develop the TSP and coordinate the transboundary collaboration. The key roles of the transboundary core secretariat are mainly:

- Development of strategies for TBNRM including ensuring the required high level political support
- Ensuring a harmonized approaches to conservation in the N-K landscape
- Securing stable and sustainable financing for biodiversity conservation and management of the N-K landscape
- TSP planning, monitoring and evaluation

The Transboundary Core Secretariat members are the Executive Directors of RDB T&C and INECN, the technical members from the two institutions and WCS as a facilitator of the process. The core secretariat composition may be revised considering its mandate and new situation to allow it to achieve effectively its mission.

### **7.1.3. Technical Committees**

The implementation of the TSP will be facilitated by the establishment of Technical Committees in the specialized areas of the plan:

- Ecological Monitoring and Research
- Tourism
- Community Conservation and Enterprise Development and
- Security and Law Enforcement

The role of the technical committees will be to advise the core secretariat on their areas of expertise to facilitate TSP implementation. Their ToRs will be finalized by the Core Secretariat and the technical committees.

Each committee will be composed by one representative from the PAs in each country and 3 other members from NGOs and other partners per country. The total number of each committee will be 8, a good audience that will facilitate communication and organization of regular discussion and meetings. The members of the different technical committees will be designated by the core secretariat in a balanced manner to have many partners on the board.

#### **7.1.4. Regional Transboundary Forum**

The regional forum involves all stakeholders in the N-K landscape. The forum will be organized on annual basis and will represent an opportunity for the core secretariat to update and discuss the TSP implementation. The forum will also facilitate the exchange information and experiences and to update and align work plans among different partners.

#### **7.2. Operational Planning.**

The TSP implementation will be through concerted and harmonized annual operational planning processes developed at regional and country levels. The strategic plan and protected areas management plans will be aligned. Different activities that can be carried out at regional or country level will be clearly defined and translated into programmes interventions. Efforts to harmonise the planning cycle and plan implementation monitoring will be undertaken. The TSP implementation will require budget and the two countries will be encouraged to write joint proposals and to organise the fundraising. The facilitator and other regional organisations involved in natural resource management will help in the fundraising process.

#### **7.3. Funding**

The budget highlighted in Table..... is only a guestimate. It shall be fine tuned during operational planning or during development of discrete projects targeting any of the KRA. It is the duty of the TCS to identify potential sources of funding, lobby and negotiate with potential donors. The source of funding could be NGOs, Governments, Development Agencies etc.

## **8. BUDGET ESTIMATES**

The estimates presented here under are very rough and would need to be fine tuned during program development. The estimates are for 10 years but would also need revision after five years of implementation to ensure that they are still relevant.

**Table 6:** Budget estimates

Strategic Objectives	Major activities	Input	Budget estimates (US\$)	Remarks
<b>SO1. Policies and laws are in place and harmonized for the sustainable development and conservation of the landscape Kibira-Nyungwe.</b>				
Strategy 1.1. Review policies and formalise the TB collaboration framework	1. Identify key policies that can better facilitate the transboundary collaboration	Consultancy for assessment & harmonisation of the legal and policy system	25,000	
	2. Advocate and initiate legislative changes at national level to include new or harmonized existing policies to support transboundary collaboration	Technical Committee meetings & Regional TB meetings	120,000	
	3. Increase public awareness at regional level about the new adopted policies	Media for coverage and sensitization campaigns	15,000	Publish / awareness activities every year
	4. Formalize the process and increase the political support to the TB collaboration.	Technical and Political meetings (involving high ranking authorities)	50,000	
	5. Set up collaborative mechanisms between the security and law enforcement organs in order to strengthen the security across the landscape Nyungwe-Kibira	Ref. SO.1.1. act.2.	0	
<b>SO.1 Sub Total</b>			<b>210,000</b>	
<b>SO.2. Capacity to manage the Nyungwe-Kibira TB for institutions and others stakeholders is enhanced.</b>				

<b>Strategic Objectives</b>	<b>Major activities</b>	<b>Input</b>	<b>Budget estimates (US\$)</b>	<b>Remarks</b>
Strategy 2.1. Align the Institutional structures of INECN and RDB/ORTPN to facilitate the TB collaboration.	1. Identify areas for alignment for the two institutions	Consultancy	19,000	
	2. Initiate institutional programme review where appropriate	Workshops	42,000	
	3. Adopt the institutional programme review			
	4. Increase the public awareness about the new changes	Media coverage and sensitization	112,000	

<b>Strategic Objectives</b>	<b>Major activities</b>	<b>Input</b>	<b>Budget estimates (US\$)</b>	<b>Remarks</b>
Strategy 2.2. Coordinated planning and monitoring of the N-K landscape	1. Develop and review regularly the regional management plan.	Development of the plan	50,000	
	2. Develop and implement TB operational plans	Develop operational plans	40,000	
	3. Contribute to the development and review of the Nyungwe and Kibira management plans and ensure that they are well harmonized with the TB plans	Review the individual management plans	100,000	
	4. Establish and manage a regional information system	Consultancy and equipment	517,000	
	5. Sharing existing resources in the planning process	Staff travels and meetings	40,000	
Strategy 2.3. Capacity of PA staff and others stakeholders is enhanced	1. Identify capacity needs and develop a capacity building plan for the N-K landscape	Consultancy	15,000	
	2. Implement a capacity building plan and develop a mechanism for sharing regional resources, management skills and good experiences.	Capacity building sessions and activities	4,060,000	Make use of the existing KCCEM
	3. Establish an harmonized policy for staff recruitment and motivation	consultancy	20,000	
	4. Develop a monitoring and Evaluation plan, including indicators of staff performance	Ref. S.2.3. act.3	0	
Strategy 2.4. Management oriented research aimed at sustainable conservation of biodiversity	1. Develop a regional research plan with research priorities	Consultancy	40,000	

Strategic Objectives	Major activities	Input	Budget estimates (US\$)	Remarks
in the Nyungwe-Kibira landscape undertaken				
	2. Undertake key priority management oriented researches	Consultancy / Research	350,000	
<b>SO 2. Sub Total</b>			<b>5,405,000</b>	
<b>SO 3. The ecological, economic and social values of the Nyungwe-Kibira landscape are well understood.</b>				
Strategy 3.1 Assessment and marketing of the ecological, economic and social values of Nyungwe-Kibira Landscape	1. Assess the value of ecosystem services and their beneficiaries	Consultancy	30,000	
	2. Create awareness about the importance of ecological, economic and social values of the N-K Pas at local, national, regional and international levels	Awareness and Sensitization campaigns	90,000	
	3. Initiate approaches for Payment for Ecosystem Services (PES).	Implementation pilot phase	300,000	
<b>SO 3 Sub total</b>			<b>420,000</b>	
<b>SO4. Attitude and behaviour of stakeholders have changed because of the good understanding of the value and importance of the Nyungwe-Kibira landscape.</b>				
Strategy 4.1 Positive attitude towards N-K Protected landscape encouraged.	1. Increase a better understanding of the objectives and importance of N-K conservation landscape among different stakeholders.	Training workshops for various targets groups	375,000	
	2. Improve and harmonize sensitisation programmes tailored to different social groups and categories.	Workshops and working sessions	300,000	
Strategy 4.2.	1. Improve and harmonize sensitization	Ref. S4.1.act.2	0	

<b>Strategic Objectives</b>	<b>Major activities</b>	<b>Input</b>	<b>Budget estimates (US\$)</b>	<b>Remarks</b>
Acceptance of the PA as an important resource to be managed by different partners including local community	programmes			
	2. Involve local communities in the management of PAs	Pilot joint actions (like fire fighting program)	720,000	
	3. Develop and harmonize incentives for communities to sustainably manage the PAs	Pilot actions RS projects	3,150,000	
<b>SO4 Sub Total</b>			<b>4,545,000</b>	
<b>SO5. Conservation of the Nyungwe-Kibira landscape contributes to the human welfare at local, regional and international levels.</b>				

Strategic Objectives	Major activities	Input	Budget estimates (US\$)	Remarks
Strategy.5.1 Natural resource based economic development promoted to support conservation efforts and contribute to the welfare of local, regional and international community	1. Asses the existing and potential economic benefits of the N-K protected areas	Consultancy	100,000	
	2. Review resource access policies and explore areas of harmonization at regional level	Consultancy	30,000	
	3. Identify opportunities for and support private sector led wildlife enterprise development (market development, farming, wildlife ranching..)	Support pilot project;	200,000	Study tours in countries where this is implemented (Kenya, SA)
	4. Promote reforestation programme in the region to ensure sustainable forest production.	Reforestation program	4,400,000	
	5. Initiate Payment of ecosystem services programmes (carbon sequestration, hydropower production...).	Enforce the PES on users	700,000	
Strategy.5.2 Sustainable economic development of the natural resource based tourism enhanced	1. Develop a regional tourism plan that covers infrastructure development, marketing and visitor services.	Consultancy & Workshop to develop the plan	50,000	
	2. Link different destinations and coordinate the movements of tourists in the region (visa aspects, transport...).	Working sessions with relevant players	60,000	
	3. Harmonise visitor charges for common tourism products and visitor handling standards.	Ref. S.5.2. act. 2	0	

Strategic Objectives	Major activities	Input	Budget estimates (US\$)	Remarks
Strategy.5.3. Required infrastructure for tourism and PA management identified and developed	1. Carry out an infrastructure capacity development needs assessment for the Nyungwe and Kibira.	Consultancy	35,000	
	2. Develop fundraising proposals; solicit for funding and infrastructure development	Fundraising process	20,000	
Strategy 5.4. Local communities participating in and benefiting from natural resource management and other development initiatives	1. Involve local communities and local authorities in conservation related planning and development in and around the PAs through the ongoing decentralisations processes	Training sessions of target groups	415,000	Make use of KCCEM
	2. Develop incentives for communities to support conservation in the region	Initiate pilot projects	183,000	
	3. Harmonize the revenue sharing policy. Promote the development of micro-projects for the population surrounding the PAs	Working sessions	20,000	
	4. Develop linkages with development partners and other natural resource management initiatives	Working sessions	15,000	
<b>SO5 Sub Total</b>			<b>6,228,000</b>	
<b>SO 6. Nyungwe –Kibira landscape is restored and well protected</b>				

Strategic Objectives	Major activities	Input	Budget estimates (US\$)	Remarks
Strategy.6.1. Formal transboundary collaborative law enforcement mechanisms to control illegal activities established in the N-K landscape.	1. Develop and harmonize mechanisms to control and reduce illegal activities in the N-K landscape	Ratify and implement international agreements relevant to transboundary illegal activities	10,000	
	2. Develop collaborative mechanisms to address and reduce illegal TB activities	Patrol equipment and ratios; Joint coordinated patrols	350,000	
	3. Establish collaborative mechanisms with key players (PAAs, police, army, immigration, local authorities..) to better address conservation challenges in the region	Working sessions; Sensitization and capacity building sessions	10,000	
Strategy 6.2. Connectivity and integrity of core wildlife PAs in the Nyungwe-Kibira Landscape ensured	1. Assess and map out the wildlife areas requiring connectivity within Nyungwe-Kibira Landscape	Ecological assessment (aerial & field surveys)	1,400,000	
	2. Work with relevant stakeholders to survey, document and demarcate the PA boundaries	Working session, sensitization campaigns	1,085,000	
	3. Develop and implement programme for rehabilitation of corridors, buffer zones and encroached areas	Consultations, technical meetings, workforce	2,500,000	
Strategy 6.3. Degraded areas are well protected and restored in the N-K landscape	1. Identify affected areas and the causes of degradation in the N-K landscape	Ref. S.6.2. act. 1 & 2	0	

<b>Strategic Objectives</b>	<b>Major activities</b>	<b>Input</b>	<b>Budget estimates (US\$)</b>	<b>Remarks</b>
	2. Work with different partners to reduce conservation threats to the degraded areas	Ref. S.5.4. act. 1 & 2	0	
	3. Develop adopt and implement restoration mechanisms	Consultancy	30,000	
	4. Adopt and harmonize Monitoring approaches of the N-K landscape	Working sessions and purchase of equipment	120,000	
Strategy.6.4. Integrity of PA assured through development of mechanisms for natural disaster management	1. Develop a policy for management of potential calamities	Consultancy	11,000	
	2. Set up an early warning system for natural disasters	Purchase equipment and train staff on its use	1,250,000	
<b>SO6 Sub Total</b>			<b>6,766,000</b>	
<b>SO7. Functioning regional collaborative mechanisms are in place.</b>				
Strategy 7.1. Coordination mechanisms enhanced to contribute towards avoiding conflicts, duplication and wastage of existing resources.	1. Develop regional coordination policy and mechanisms that will guide the implementation of the TSP	Consultancy	30,000	
	2. Set up and support the functioning of the Transboundary Executive Secretariate for Nyungwe – Kibira Landscape	Human resources and logistics	5,000,000	
	3. Establish functioning regional technical committees to facilitate coordination	Working sessions of the 4 technical committees	2,500,000	
	4. Establish an enabling environment	Training session,	420,000	

<b>Strategic Objectives</b>	<b>Major activities</b>	<b>Input</b>	<b>Budget estimates (US\$)</b>	<b>Remarks</b>
	that will encourage private sector to invest in wildlife conservation	study tours to Ke and SA		
KS.7.2. Effective communication mechanisms between PAAs and other stakeholders established	1. Establish common radio frequency or other communication means (mobile phone, internet..) to enable cross-border communications between the PAs staff	Purchase communication equipment and look for permission to use common frequency	400,000	
	2. Establish mechanisms for communication and sharing information between different stakeholders	Regular information update and sharing	45,000	
<b>SO 7 Sub Total</b>			<b>8,395,000</b>	
<b>SO8. Long -term sustainable financing mechanisms established</b>				
KS.8.1. Explore sustainable financial mechanisms and their applicability	1. Develop a regional business and investment plan for N-K landscape.	Consultancy and workshop for plan development	15,000	
	2. Establish a regional conservation financing mechanism for Nyungwe-Kibira and launch the implementation of the mechanism	Consultancy and workshop	4,500,000	Initiate the process of an Endowment Fund
	3. Establish mechanism for regional tourism development in the N-K landscape	Workshop with relevant players	25,000	
	4. Establish mechanism for Payments of Ecosystem Services (PES) for N-K landscape	Initiate pilot initiative of PES	30,000	
<b>SO Sub Total</b>			<b>4,570,000</b>	

**Table 7: Budget Summary**

<b>SO</b>	<b>Total</b>
SO1. Policies and laws are in place and harmonized for the sustainable development and conservation of the landscape Kibira-Nyungwe.	210,000
SO2. Capacity to manage the Nyungwe-Kibira TB for institutions and others stakeholders is enhanced.	5,405,000
SO 3. The ecological, economic and social values of the Nyungwe-Kibira landscape are well understood.	420,000
SO4. Attitude and behaviour of stakeholders have changed because of the good understanding of the value and importance of the Nyungwe-Kibira landscape.	4,545,000
SO5. Conservation of the Nyungwe-Kibira landscape contributes to the human welfare at local, regional and international levels.	6,228,000
SO 6. Nyungwe –Kibira landscape is restored and well protected	6,766,000
SO7. Functioning regional collaborative mechanisms are in place.	8,395,000
SO8. Long -term sustainable financing mechanisms established	4,570,000
<b>Grand Total</b>	<b>36,539,000</b>

## 9. MONITORING FRAMEWORK

It should be noted here that overall responsibility for implementation of this plan lies with the PAA. They however will do this in collaboration with other stakeholders

**Table 8:** Monitoring Framework

<b>Vision</b>	The integrity of Nyungwe-Kibira Ecosystem is restored, its ecological, economic and social values are recognised and accessible for the sustainable development at local, national and global levels			
<b>Overall Goal</b>	The transboundary collaboration mechanisms are established, and operational for an integrated management of the Nyungwe-Kibira Ecosystem			
<b>Strategic Objective</b>	<b>Strategies</b>	<b>Indicator</b>	<b>Means of Verification</b>	<b>Stakeholders</b>
SO.1. Policies and laws are in place and harmonized for the sustainable development and conservation of the landscape Kibira-Nyungwe.	S.1. Review policy and harmonise TB collaboration framework	<ul style="list-style-type: none"> <li>▪ All wildlife policy reviewed &amp; harmonized by 2<sup>nd</sup> yr</li> <li>▪ Legal agreement between governments signed by yr 6</li> <li>▪ Institutional policies on tourism, R &amp; M &amp; Community Conservation harmonised by yr 3<sup>rd</sup> yr</li> </ul>	<ul style="list-style-type: none"> <li>▪ Updated policy documents with necessary provisions</li> </ul>	RDB T&C, INECN, WCS, IUCN, Environment Agencies, line Ministries, Parliaments
SO.2. Capacity to manage the N-K TB for institutions and others stakeholders is enhanced.	<i>S.2.1 Align the Institutional structures of INECN and RDB T&amp;C to facilitate the TB collaboration.</i>	<ul style="list-style-type: none"> <li>▪ Institutional structures of RDB T&amp;C and INECN for the TB Collaboration entrusted by 2<sup>nd</sup> yr</li> </ul>	<ul style="list-style-type: none"> <li>▪ Rapports for institutional reviews</li> </ul>	RDB T&C, INECN, BoD of the 2 Institutions, line ministries
	S.2.2 Coordinated planning and monitoring of the Nyungwe-Kibira landscape	<ul style="list-style-type: none"> <li>▪ Management and operational planning process developed &amp; implemented by yr 3</li> <li>▪ Regional information management system developed and functional by year 3</li> </ul>	<ul style="list-style-type: none"> <li>▪ Document on Management and Operational Planning</li> <li>▪ Operational Information Management System</li> </ul>	RDB T&C, INECN, WCS, other Research institutions

	S.2.3. Capacity of PA staff and others stakeholders is enhanced and standardised	<ul style="list-style-type: none"> <li>▪ Training needs assessment carried out by 1<sup>st</sup> year, and training plan developed by year 2</li> <li>▪ At least 2 regional training programmes per year to enhance and standardise the management capacity</li> <li>▪ 10% reduction in illegal activities &amp; population of key species maintained or increased</li> </ul>	<ul style="list-style-type: none"> <li>▪ Report</li> </ul>	RDB T&C, INECN, WCS, KCCCEM
	S.2.4. Management oriented research aimed at sustainable conservation of biodiversity in the Nyungwe-Kibira landscape undertaken	<ul style="list-style-type: none"> <li>▪ Regional research and monitoring plan in place within 2yrs</li> </ul>	<ul style="list-style-type: none"> <li>▪ Regional plans</li> <li>▪ Research report</li> </ul>	RDB T&C, INECN, WCS, Universities and Research Institutions
SO3. The ecological, economic and social values of the Nyungwe-Kibira landscape are well understood.	S.3.1. Assessment and marketing of the ecological, economic and social values of Nyungwe-Kibira Landscape	<ul style="list-style-type: none"> <li>▪ Resource Valuation initiated by the year 2</li> <li>▪ Marketing Campaign launched by year 3rd</li> </ul>	<ul style="list-style-type: none"> <li>▪ Valuation Report</li> <li>▪ Marketing tools</li> </ul>	RDB T&C, INECN, Donors Community, Local communities, Media, local NGOs
SO4. Attitude and behaviour of stakeholders have changed because of the good understanding of the value and importance of the Nyungwe-Kibira	S.4.1: Positive attitude towards N-K Protected landscape encouraged	<ul style="list-style-type: none"> <li>▪ 20% positive change in community attitude as compared to baseline (yr 1) every two years</li> </ul>	<ul style="list-style-type: none"> <li>▪ Assessment Report</li> </ul>	RDB T&C, INECN, Ministries responsible for Natural Resource, local communities, local NGOs

landscape.				
	S.4.2. Acceptance of the PA as an important resource to be managed by different partners including local community	<ul style="list-style-type: none"> <li>Extent &amp; number of illegal activities across the border reduced by 10% by 5<sup>th</sup> year</li> </ul>	<ul style="list-style-type: none"> <li>Law Enforcement Reports</li> </ul>	RDB T&C, INECN, NGOs dealing with local communities
SO5. Conservation of the Nyungwe-Kibira landscape contributes to the human welfare at local, regional and international levels.	S.5.1 Natural resource based economic development promoted to support conservation efforts and contribute to the welfare of local, regional and international community,	<ul style="list-style-type: none"> <li>Resource access policy for the region developed by the 4<sup>th</sup> yr and at least one private sector conservation based enterprise in each country by the 8<sup>th</sup> yr</li> <li>At least one private sector conservation based enterprise in each country by the 8<sup>th</sup> yr</li> </ul>	<ul style="list-style-type: none"> <li>Resource access document</li> <li>Field visit report</li> </ul>	RDB T&C, INECN, WCS, Private sector agencies, Investment authorities
	S.5.2: Sustainable economic development of the natural resource based tourism enhanced	<ul style="list-style-type: none"> <li>Policy on regional tourism developed by the 4<sup>th</sup> year &amp; implementation initiated by the 5<sup>th</sup> year</li> </ul>	<ul style="list-style-type: none"> <li>Policy document</li> </ul>	RDB T&C, INECN, WCS, tourism agencies & operators, investment agencies
	S.5.3. Required infrastructure for tourism and PA management identified and developed	<ul style="list-style-type: none"> <li>Infrastructure development plan in place by 5<sup>th</sup> yr &amp; funding secured by 6<sup>th</sup> yr</li> <li>Planned infrastructure in place and in use by the year 10</li> </ul>	<ul style="list-style-type: none"> <li>Report on existing and potential infrastructure</li> </ul>	RDB T&C, INECN, funding agencies
	S.5.4. Local communities participating in and benefiting from natural resource management and other development initiatives	<ul style="list-style-type: none"> <li>Regional revenue sharing policy catering for microproject in place by the 7<sup>th</sup> year</li> <li>A community institution for each identified administrative unit in place</li> </ul>	<ul style="list-style-type: none"> <li>Policy document</li> <li>Minutes of meetings between PAAs &amp; Community institutions</li> </ul>	RDB T&C, INECN, WCS, Communities, NGOs, CBOs

		<p>in each country &amp; participating in conservation related planning and development</p> <ul style="list-style-type: none"> <li>▪ Linkages with development partners / initiatives</li> </ul>		
SO6. Nyungwe - Kibira landscape is restored, well protected, and sustainably conserved	S.6.1. Formal transboundary collaborative law enforcement mechanisms to control illegal activities established in the Nyungwe-Kibira landscape.	<ul style="list-style-type: none"> <li>▪ TB law enforcement agreed by 2<sup>nd</sup> yr &amp; joint patrols initiated by 3<sup>rd</sup> yr</li> <li>▪ Extent &amp; number of illegal activities across the border reduced by 10% by year 4th</li> </ul>	<ul style="list-style-type: none"> <li>▪ MoU</li> <li>▪ PAs law enforcement reports</li> </ul>	RDB T&C, INECN, security & law enforcement agencies, decentralised administrative structures (local governments)
	S.6.2. Connectivity and integrity of core wildlife PAs in the Nyungwe-Kibira Landscape ensured	<ul style="list-style-type: none"> <li>▪ Boundaries of PAs restored, mapped and demarcated by year 3<sup>rd</sup></li> <li>▪ Required corridors &amp; buffer zones identified by 2<sup>nd</sup> year &amp; negotiations with occupants initiated by 3<sup>rd</sup> yr</li> </ul>	<ul style="list-style-type: none"> <li>▪ PAA reports and ground truthing</li> <li>▪ Maps</li> </ul>	RDB T&C, INECN, relevant ministries, National Land Center, Forestry Departments, Local governments
	S.6.3. Degraded areas are well protected and restored in the Nyungwe-Kibira landscape	<ul style="list-style-type: none"> <li>▪ Degraded areas identified and mapped by year 2<sup>nd</sup></li> <li>▪ Restoration process initiated by year 3</li> </ul>	<ul style="list-style-type: none"> <li>▪ PAA reports and ground truthing</li> <li>▪ Maps</li> </ul>	RDB T&C, INECN, WCS, Research Institutions, Donors
	S.6.4. Integrity of PA assured through development of mechanisms for natural disaster management	<ul style="list-style-type: none"> <li>▪ Regional policy for natural disaster management in place by yr 6<sup>th</sup></li> <li>▪ Early warning system in place and operational by yr 6<sup>th</sup></li> </ul>	<ul style="list-style-type: none"> <li>▪ Policy document</li> </ul>	RDB T&C, INECN, WCS, relevant ministries
SO7. Functioning regional	S.7.1. Coordination mechanisms enhanced to	<ul style="list-style-type: none"> <li>▪ Coordination guidelines &amp; mechanism in place and</li> </ul>	<ul style="list-style-type: none"> <li>▪ Guidelines</li> <li>▪ Minutes of the</li> </ul>	RDB T&C, INECN, WCS, TES, Donors,

collaborative mechanisms are in place.	contribute towards avoiding conflicts, duplication and wastage of existing resources.	<p>used by end of 2<sup>nd</sup> yr</p> <ul style="list-style-type: none"> <li>▪ Functioning Transboundary Executive Secretariate established by year 2</li> <li>▪ Technical committees established by end of yr 1</li> </ul>	<p>different technical committees</p> <ul style="list-style-type: none"> <li>▪ Working plans and Reports of TES</li> </ul>	line ministries
	S.7.2. Effective communication mechanisms between PAAs and other stakeholders established	<ul style="list-style-type: none"> <li>▪ At least 50% of the relevant PAA staff trained in English, French &amp; Swahili by the 5<sup>th</sup> year</li> <li>▪ Common Radio frequency established and functional</li> </ul>	<ul style="list-style-type: none"> <li>▪ Assessment report</li> <li>▪ Operational frequency</li> </ul>	RDB T&C, INECN, WCS, KCCEM
SO8. Long -term sustainable financing mechanisms established	S.8.1. Explore sustainable financial mechanisms and their applicability	<ul style="list-style-type: none"> <li>▪ Regional finance mechanisms initiated by the 3<sup>rd</sup> year &amp; operational by the 8<sup>th</sup> year</li> <li>▪ Regional tourism circuits developed by year 4</li> </ul>	<ul style="list-style-type: none"> <li>▪ Proposal</li> <li>▪ Legal documents</li> </ul>	RDB T&C, INECN, WCS, donors, line ministries

**References:**

- Albertine Rift Strategic Framework (2004). A framework for conservation in the Albertine Rift. 2004-2030. Planning Report
- Annette, L. et al. (2001). Beyond Boundaries: Transboundary Natural Resource Management for Mountain Gorillas in the Virunga-Bwindi Region. Washington, D.C., U.S.A.: Biodiversity Support Program.
- INECN, 2009: General Management Plan, Kibira National Park
- International Gorilla Conservation Program. 2006. Ten-year Transboundary Strategic Plan. Central Albertine Rift Transboundary Protected Area Network. Kigali. Transboundary Core Secretariat.
- Katerere, Y. et al. (2001). A critique of Transboundary Natural Resource Management in Southern Africa. Paper 1, IUCN-Rosa on Transboundary Natural resource Management
- Kayitare, A. (2005) can Transboundary Natural Resource Management contribute to enhance conservation and poverty alleviation in border region.? A case study of the Virunga-Bwindi TBNRM. MA dissertation, University of Sussex, Brighton, UK.
- Masozera, M. 2008. Valuing and capturing the benefits of ecosystem services of Nyungwe Watershed, Southwest Rwanda. Kigali, WCS/IRG. 49p
- ORTPN, 2005: General Management Plan 2006-2010, Nyungwe National Park
- Plumptre, A.S., A. Kayitare, H. Rainer, M. Gray, I. Munabura, N. Barakabuye, A. Asuma, M. Sivha, and A. Namara. 2004. The Socio-economic Status of People Living near Protected Areas in the Central Albertine Rift. WCS, IGCP, CARPE. Central Albertine Rift Technical Report No. 4. 127p
- Sandwith, T. et al. (2001). Transboundary Protected Areas for peace and cooperation. IUCN, Gland, Switzerland and Cambridge, UK. Xi + 111p.
- Van der Linde, H. et al. (2001). Beyond Boundaries: Transboundary Natural Resource Management in Sub-Saharan Africa. Washington, D.C., U.S.A.: Biodiversity Support Program
- Zaremba, J.(2002). Can Transfrontier Conservation Areas help achieve the objectives of the convention on Biodiversity? A case of Chimanimani transfrontier area of Mozambique. Sussex thesis; M1431

## Appendices

### Appendix 1: List of Participants

Meeting, July 27<sup>th</sup> 2009.

Names	Function	Addresses
1. Hatugimana Jonathan	Chef de de parc du PNK	79982193
2. Ntibashira Azarie	Chef de secteur Mabayi	77781223
3. Bantegeyahaga Ezechiel	Chef de secteur Teza	77709107
4. Nsaguye Isidore	Chef de secteur Rwegura	-
5. Barayandema Jean Baptiste	Chef de secteur de Musigati	79928607
6. Siboniyo Fabien	Conseiller DT INECN	79966901
7. Mulindahabi Felix	Recherche & Admin PCFN/WCS	<a href="mailto:Felixmud2001@yahoo.com">Felixmud2001@yahoo.com</a>
8. Nindorera Damien	Conseiller Juridique INECN	<a href="mailto:dnindorera@yahoo.fr">dnindorera@yahoo.fr</a>
9. Samagorwa James	Admin Comm. Bikinanyana	77748465
10. Niragira Isaie	Admin. Comm. Musigati	79334047
11. Hategekimana J.M vianney	Admin. Comm Mabayi	77740918
12. Nduwimana Sennel	Gouverneur de Kayanza	79220461
13. Mashurushuru Jonas	Journaliste	77747030
14. Bizimungu Simon	Gouverneur Cibitoke	777774407
15. Ndikumagenge Deus	Conseiller economique du gouverneur de Muramvya	79920823
16. Ndagijimana Dieudene	DT INECN	22403033
17. Alphonse Fofu	Chef de service R E/INECN	INECN
18. Kayitare Anecto	Consultant	Kigali
19. Nzigidahera Benoit	Responsable Recherche/INECN	INECN
20. Aline Njebarikanuye	Programme recherche INECN	INECN
21. Ndabahagarye Francois	Service Education Env. INECN	INECN
22. Kamariza Esperance	Conseiller a la DG de l'ATRGR	Bujumbura
23. Chantal Nimbona	Journaliste a l'ABP	Bujumbura
24. Mutananirwa Anicet	Commandant de la police de l'Environnement Kayanza	Kayanza
25. Bizimungu Francois	Research & Monitoring Manager	ORTPN Kigali
26. Ian Munanura	-	WCS

---

27. Mpayana Raphael	Project coordinator	REMA/Rwanda
28. Rukazambuga Gilbert	Secrétaire Exécutif Bweyeye	Rusizi-Rwanda
29. Ndonse Sylvestre	Conseiller a la DG de foret	Bujumbura
30. Sinankwakure Fabien	Chef de cabinet MTPE & Président CA INECN	Bujumbura