



MAYOMBE TRANSBOUNDARY INITIATIVE



Towards a transboundary protected area complex in the Mayombe forest ecosystems

Strategic Plan

March 2013





MAYOMBE TRANSBOUNDARY INITIATIVE

STRATEGIC PLAN FOR THE ESTABLISHMENT OF A TRANSBOUNDARY PROTECTED AREA COMPLEX IN THE MAYOMBE FOREST ECOSYSTEMS

APPROVED BY THE MINISTERS OF THE COUNTRIES PROMOTING THE MAYOMBE
INITIATIVE DURING THE FEBRUARY 2013 MINISTERIAL MEETING



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NOTA BENE

- The initial version of this strategic plan was developed by Tamar Ron¹. This version reflects comments received by several experts from DRC, Congo, Angola, UNEP², the IUCN³ Secretariat and Commissions.
- Gabon officially joined the Mayombe initiative at the Transboundary Council of Ministers of February 2013, during which the Strategic Plan was approved. Since the said plan was developed before its accession (widely desired and envisaged all along the process), a quick updating is required to include the context of the Gabonese part of Mayombe and the specific concerns of competent authorities for the implementation of the initiative in conjunction with other members States.

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ACRONYMS

BR	Biosphere Reserve
CAR	Central Albertine Rift
CARPE	Central African Regional Program for the Environment
CBFP	Congo Basin Forest Partnership
CBNRM	Community Based Natural Resources Management
CBO	Community Based Organization
DRC	Democratic Republic of Congo
EIA	Environmental Impact Assessment
GEF	Global Environment Fund
GIS	Geographic Information System
GRASP	Great Apes Survival Partnership
HBWAs	High Biodiversity Wilderness Areas
HEC	Human Elephant Conflict
HELP	Habitat Ecologique et Liberte des Promates
HWC	Human Wildlife Conflict
IBAs	Important Bird Areas
INTERPOL	International Police
IUCN	International Union for Conservation of Nature
JGI	Jane Goodall Institute
KRA	Key Results Area
MDDEFE	Ministère du Développement Durable de L'Economie Forestière et de L'Environnement (The Republic of Congo)
MFE	Mayombe Forest Ecosystems
MINAMB	Ministerio de Ambiente (Angola)
MoU	Memorandum of Understanding
NP	National Park
NR	Nature Reserve
PAs	Protected Areas
REDD	Reducing Emissions from Deforestation and Forest Degradation
SADC	Southern Africa Development Community
SO	Strategic Objective
SWOT	Strengths, Weaknesses, Opportunities, Threats
TFCA	Transfrontier Conservation Area
TPA	Transfrontier Protected Area
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
USAID	United States Agency for International Development
WCS	Wildlife Conservation Society
WWF	World Wildlife Fund

SUMMARY

The vision guiding the creation and management of the Mayombe forest TPA is: ***Sustainable management of the Mayombe forest ecosystems, for protecting biodiversity of global importance, and for enhancing socio-economic development, a culture of peace and cooperation in a trans-boundary and post-conflict zone, and beyond.***

The Cabinda Accord and MoU, setting the terms for collaboration in the conservation and sustainable management of the Mayombe forest ecosystems, was signed between the Democratic Republic of Congo (DRC), Angola and the Republic of Congo, in July 2009. The authorities of Gabon have expressed a general interest in potentially joining the initiative for the extension of the Mayombe forest TPA to include the northern part of the Mayombe forest ecosystems.

The Mayombe forest, shared between DRC, Angola, Congo and Gabon, forms the southern-western margin of the Congo Basin's tropical rainforest, and of the distribution of a large variety of related flora and fauna, including species of global importance such as central chimpanzee, western lowland gorilla and forest elephant and many other species related to the Guineo-Congolian center of endemism.

Despite its ecological importance, the Mayombe forest, and especially its southern part, was subjected to decades of intensive degradation, through unsustainable utilization of the natural resources, and enjoys only very little protection. Most of the local communities in the Mayombe forest area rely mainly on subsistence cultivation, small-scale husbandry, anarchic logging, poaching and fishing for their livelihood. Significant differences in the levels of degradation of adjacent components of the Mayombe forest ecosystems and the existence of transboundary issues resulted with the conclusion that cooperation between the countries that share the Mayombe forest, through stakeholders' engagement, is essential for enabling the protection, sustainable management and rehabilitation of its ecosystems' integrity and biodiversity, and as a

basis to enable sustainable economic development and poverty alleviation, throughout the region.

The Mayombe forest TPA creation, planning and management would be based on a biosphere reserve approach and a participatory process. The spatial planning of the TPA would integrate core zones protected strictly for conservation and research, with buffer zones of well-controlled sustainable management and transition zones of various multiple uses with differential disturbances.

The geographic limits of the Mayombe forest TPA will be determined in three distinct phases: (1) the southern part of the Mayombe forest ecosystems, between DRC, Angola and Congo; (2)

Extension of the TPA to include the northern part of the Mayombe forest ecosystems, between Congo and Gabon; and (3) extension of the TPA to the west, to include the coastal context.

A SWOT situation analysis of the Mayombe forest ecosystems summarizes and rates the strengths, weaknesses, opportunities and threats, as a basis for identifying the main priorities to guide the Strategic Plan.

The Strategic Plan format is based on the general format used for the Central Albertine Rift Transboundary PA Network Strategic Plan. 46 strategies are identified for 12 Strategic Objectives, grouped into 8 Key Results Areas. The Strategic Objectives give direction to the plan and act as a reference for monitoring progress and evaluating performance.

The Key Results Areas are:

- KRA1: Legal and policy frameworks

- KRA2: Institutional frameworks and a participatory approach
- KRA3: Spatial planning and sustainable management of the Mayombe forest TPA
- KRA4: Sustainable economic development
- KRA5: Law enforcement
- KRA6: Awareness, education, and technical capacity building
- KRA7: Financial sustainability
- KRA8: Research and ecological monitoring

The institutional framework for guiding the Strategic Plan would be based on the Cabinda MoU, but

would be reviewed by the signatory governments and a more practical and lean structure would be considered. A Transboundary Project Coordination Unit would be responsible for management and coordination of the Strategic Plan's implementation, and would be replaced by the end of five years by a permanent TPA Secretariat.

Conceived for an initial 5-year period, the plan includes the creation, development and effective management of the Mayombe forest transboundary protected area. It can be revised after 5 years and at any time based on the evolution of strategic objectives, on regional and national contexts as well as on biodiversity conservation and sustainable development agendas at the international level.

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I. BACKGROUND

I.1. INTRODUCTION

I.1.1. GENERAL INTRODUCTION

This Strategic Plan is based on the general format used in the Strategic Plan of the Central Albertine Rift Transboundary Protected Area Network (2006)⁴. However, this document is adapted to the Mayombe forest initiative's specific conditions, identified threats and priorities, and information availability. Lessons learned from experience of other TFCAs/TPAs in the region were also assimilated.

The Mayombe forest transfrontier conservation initiative, aiming to protect and sustainably manage the Mayombe forest ecosystems through cooperation between the countries that share them (initiating with the southern part), and through a participatory approach with stakeholders within each country, was conceptualized since the early 2000s in Cabinda, Angola⁵. The Mayombe Transfrontier Project⁶, covering as a first phase the southern part of the forest, between the Democratic Republic of Congo (DRC), Angola and the Republic of Congo, is operational since December 2009. UNEP-GRASP elaborated the project document based on the early proposal developed in Cabinda, mobilized initial support from the Norwegian Government, and contracted IUCN to manage the project. Following an initial project phase, implemented during 2010, an interim phase is currently being implemented, through an agreed short-term Workplan from April 2011, and as a basis for the preparation of an agreed long-term strategy for the Mayombe forest TPA creation and operation.

The Cabinda Accord and MoU, setting the terms for collaboration in the conservation and sustainable management of the Mayombe forest ecosystems, was signed between DRC (Ministry of Environment, Nature Conservation and Tourism), Angola (Ministry of Environment, MINAMB) and the Republic of Congo (Ministry of Sustainable Development, Forestry Economy and Environment, DDEFE), in July 2009. The authorities of Gabon have expressed a general interest in potentially joining the initiative for the extension of the Mayombe forest TPA to include the northern part of the Mayombe forest ecosystems.

I.1.2. THE MAYOMBE FOREST ECOSYSTEMS

The Mayombe forest, shared between DRC, Angola, Congo and Gabon, forms the southern-western margin of the Congo Basin's tropical rainforest, and of the distribution of a large variety of related flora and fauna, including species of global importance such as the chimpanzees, lowland gorillas, forest elephants and many other species related to the Guineo-Congolian center of endemism (specifically, of the Lower Guinea

⁴ Central Albertine Rift Transboundary Protected Area Network, Transboundary Core Secretariat. 2006. Ten Years Transboundary Strategic Plan. ICCN, UWA and ORTPN, supported by IGCP.

⁵ E.G RON, T. 2003. The conservation of the Maiombe forest, Cabinda, Angola, within the framework of a transfrontier conservation initiative. The world parks congress, September 2003, Durban, South Africa;

- ron, t. 2004. the Maiombe forest in Cabinda, conservation efforts, 2000-2004. biodiversity conservation in Cabinda province. Workshop, 10.11.2004.

⁶ UNEP. 2009. Forest conservation, environmental cooperation and improved human livelihoods in ecosystems of international importance - The Congo Basin. Project Document.

– the western-central part of the center of endemism)⁷. The Mayombe forest is comprised of dense moist forest, situated on the 400m-930m high massif, covering around 10,000Km² along a narrow stretch in parallel to the Atlantic coast, from south-west Gabon to the south-western tongue of DRC. The Mayombe rainforest is surrounded by a mosaic of lowland drier rainforest, woodland and savannah. The total area of the Mayombe ecosystems is around 36,000Km². The climate is hot and humid.

Following decades of intensive degradation with very little protection, most the Mayombe forest area, especially in its southern part, is comprised of various phases of succession of secondary forest, up to the climax primary forest, in small remnant patches. The northern part, and especially the Gabon component, contains more primary forest areas⁸.

The Mayombe forest area, overlapping the mountainous area of the Lower Guinea, the western-central part of the Guineo-Congolian center of endemism, is considered to be part of a Pleistocene refuge area as evidenced in botanical data. The mountainous area of the Lower Guinea is considered to be of conservation value for its plant endemism. The coastal flora is also high in plant endemism⁹.

Faunal biodiversity in the Mayombe forest is related to the Guineo-Congolian center of endemism and is remarkably rich. BirdLife International has identified four Important Bird Areas (IBAs) in the Mayombe area¹⁰. The forest is home for a large diversity of mammal species, including species of outstanding global interest, such as the central chimpanzee, western lowland gorilla and forest elephant. The known south-western limit of mandrill's distribution is in Conkouati-Douli national park (NP) in the northern part of the proposed TPA, and the African manatee is found in the large rivers and lagoons related to the Mayombe area.

The Mayombe forest ecosystems area crosses two ecoregions designated by WWF¹¹: the Atlantic Equatorial Coastal Forest ecoregion, and the Western Congolian forest-savanna mosaic ecosystem. It overlaps considerably with one of Conservation International's High Biodiversity Wilderness Areas (HBWAs)¹². The northern part of the Mayombe forest area overlaps with the southern part of the Gamba-

⁷ See: Gillet, J.F., J.L. Doucet, P.A. Nchandi Otimbo and A.G. Boubady. 2003. Evaluation des zones d'intérêt biologique et délimitation de la série de conservation. Compagnie des Bois du Gabon (CBG), UFA de Mayomba. Nature+ , IRET and TWE with FFEM support.

- Maley, J. 1987. Palaeoecology of Africa 18: 307-334. (map).

- WHITE F. 1986. *La végétation de l'Afrique. Mémoire accompagnant la carte de végétation de l'Afrique.* Unesco / AETFAT / UNSO. ORSTOM & UNESCO, Paris, France, 384 p. (quoted by Gillet et al., above)

⁸ For more information on the Mayombe forest ecosystems and biodiversity, see, e.g.:

Huntley, B. J. 1973. Proposals for the creation of a Strict Nature Reserve in the Maiombe Forest of Cabinda. Serviços de Veterinaria, Luanda, Angola;

Dowsett, R.J and F. Dowset-Lemaire. 1991. Flore et Faune du Bassin du Kouilou (Congo) et Leur Exploitation;

Dean, W.R.J. 2001. Angola. In: Fishpool, L.D.C. and M.I. Evans, eds. Important Bird Areas in Africa and associated islands. Newbury and Cambridge; Pisces Publications and Birdlife International

Batalou-Mbetani, A. 2007. L'Analyse multicritère appliquée à l'évaluation des principes, critères et indicateurs de la gestion durable de la biodiversité dans le bassin du Congo: étude de cas dans deux aires protégées au Congo Brazzaville. PhD thesis. ERAIFT, Université de Kinshasa, DRC

Ron, T. 2011. Potential for designating Protected Areas for conservation and for identifying conservation corridors as part of the planning process of the Mayombe forest TPA: Thematic Report. Mayombe Transfrontier Project. UNEP and IUCN.

⁹ Based on G. Walters, Pers. Comm., see also:

- Doumenge, C. and R. Niangadouma. 2008. Compte rendu de mission au Gabon. Project IFORA.

- Toham, A.K. et al. 2006. A vision for biodiversity conservation in Central Africa: biological priorities for conservation in the Guineo-Congolian forest and freshwater region. WWF.

¹⁰ Dean, W.R.J. 2001. Angola. In: Fishpool, L.D.C. and M.I. Evans, eds. Important Bird Areas in Africa and associated islands. Newbury and Cambridge; Pisces Publications and Birdlife International

¹¹ World Wildlife Fund: http://www.worldwildlife.org/wildworld/profiles/terrestrial/at/at0102_full.html and http://www.worldwildlife.org/wildworld/profiles/terrestrial/at/at0723_full.html

¹² See http://www.conservation.org/where/priority_areas/wilderness/Pages/default.aspx

Mayumba-Conkouati Landscape, between Gabon and Congo¹³, one of 12 Congo Basin Forest Partnership (CBFP) Landscapes, selected as conservation priorities by the USAID-Central African Regional Program for the Environment (CARPE). The forests in the border areas between Cabinda and Congo, in and around Dimonika Biosphere Reserve and in Conkouati-Douli National Park have also been classified as Intact Forest Landscapes: large remaining tracts of forest landscapes minimally disturbed by human economic activity¹⁴.

I.1.3. MAIN THREATS

Most of the proposed Mayombe forest TPA area, and especially its southern part, has been subjected to decades of severe degradation and heavy utilization of the natural resources. While logging concessions¹⁵ in all three countries in the southern part of the Mayombe forest require better regulation, control and enforcement, the anarchic artisanal logging is more destructive. Anarchic logging occurs for timber, construction, firewood and charcoal, as well as for clearing areas for household agriculture. The impact of the slash and burn cultivation practice is particularly alarming, with new plots being cleared annually, deeper and deeper into the forest. Extensive poaching, both subsistence and commercial, occurs throughout the Mayombe forest area, and especially in the southern part, with devastating impact and very little control and enforcement. Cross-border illegal trade networks of bush-meat and of pet trade (targeting mainly apes, other primates and parrots) have been identified as a major concern. Elephants are hunted mostly as a result of Human-Elephant-Conflict (HEC), as well as for meat and ivory, but probably only in a very small scale.

Most of the local communities in the Mayombe forest area rely mainly on subsistence cultivation, small-scale husbandry, anarchic artisanal logging, poaching and fishing¹⁶. Most identified core causes of the anarchic logging and especially of poaching, in the Mayombe forest, are related to the extreme poverty, the consequences of the long armed-conflicts and post-conflict impacts, and the lack of adequate alternative livelihood opportunities, combined with the lack of effective enforcement and control mechanisms.

The impact of poaching, anarchic logging and encroachment was especially devastating in the DRC component of the Mayombe forest, with most of its area being already depleted of large mammals, and many forest areas significantly degraded. Similar impacts, though to a lesser extent, are evident in most of the southern part of the Congo component. The Angolan component in the Cabinda enclave was more protected from extensive habitat degradation as a consequence of the prolonged armed conflict, but for the same reason was subjected to high level of illegal harvesting of wild flora and fauna, with significant threat to specific species caused by illegal cross-border trade networks. The northern part of the Mayombe, between Congo and Gabon, was subjected to the same causes of habitat degradation and biodiversity loss as the southern part, but to a much lesser extent.

¹³ See <http://www.worldwildlife.org/what/wherewework/congo/WWFBinaryitem8792.pdf> and http://www.observatoire-comifac.net/docs/edf2008/EN/SOF_16_Gamba.pdf

¹⁴ Greenpeace International. 2006. Roadmap to Recovery: The World's Last Intact Forest Landscapes. Greenpeace International, Amsterdam, Netherlands. (http://www.intactforests.org/publications/forestmapreport_preview.pdf)

¹⁵ for more information on logging concessions, see: pinteá, I. 2011. Land-uses and socio-economic analysis of the mayombe forest ecosystems: thematic report. mayombe transfrontier project. unep and iucn. (in prep.)

¹⁶ For more information on the population density, distribution, towns and villages, infrastructure, and other socio-economic factors, see: Pinteá, L. 2011. Land-uses and socio-economic analysis of the Mayombe forest ecosystems: Thematic Report. Mayombe Transfrontier Project. UNEP and IUCN. (in prep.)

Most of the Mayombe forest area did not go through major development operations, but several infrastructure and urban development projects may have significant environmental impact; especially the Pointe-Noire-Dolisie road, with its possible impact on connectivity.

The significant differences in the levels of degradation of adjacent components of the Mayombe forest ecosystems resulted with the conclusion that cooperation between the countries that share the Mayombe forest, combined with stakeholders' engagement, is essential for enabling the protection, sustainable management and rehabilitation of its ecosystems' integrity and biodiversity, and as a basis to enable sustainable economic development and poverty alleviation, throughout the region.

I.1.4. EXISTING CONSERVATION INITIATIVES IN THE PROJECT AREA

I.1.4.1. Existing and planned Protected Areas

Currently there are two designated Protected Areas, both identified as Biosphere Reserves (BR), in the southern part of the Mayombe forest (the 1st phase of this project): Luki BR, covering an area of 33,811ha in DRC and Dimonika BR, covering an area of 136,000ha in Congo. In addition there is the Tchimpounga Nature Reserve, covering now around 52,200ha in Congo. No Protected Area currently exists in the Angolan component of the Mayombe forest. However, the Government and the Parliament of Angola have adopted in 2011 a visionary proposal to designate most of the Mayombe (also referred to as Maiombe) forest area in Cabinda Province as a National Park, to be managed through a biosphere reserve approach, covering an area of around 193,000ha. The formal designation of this National Park occurred at the end of the year 2012¹⁷.

I.1.4.2. Existing conservation initiatives

Several projects and initiatives are implemented in the Mayombe forest area, by the governments and their partners.

WWF (World Wildlife Fund) - DRC is executing since 2004, through cooperation with the government (l'Institut National d'Etudes et de Recherches Agronomiques, INERA), and in partnership with a number of local NGOs, a project aiming to promote sustainable development in and around the Luki Biosphere Reserve, integrating economic viability, social acceptability and ecological sustainability of human activities. It is part of the project: "Support to Sustainable Management and Conservation of Forest Ecosystem".

The Ministry of Environment of Angola (MINAMB) is currently leading the designation of the Maiombe National Park in Cabinda Province, in cooperation with the Provincial Government and other stakeholders. UNDP with NORAD support and with Gremio ABC, a local NGO, supported the government in initiating conservation efforts in Cabinda, since 2000.

The Ministry of Sustainable Development, Forestry Economy and Environment of Congo (MDDEFE), re-initiated in 2010 conservation efforts in Dimonika Biosphere Reserve. WWF supports this effort with a study, conservation, sustainable management and communities' engagement project, based on experience of the WWF-DRC project in Luki BR.

¹⁷ For more information see, e.g.: Ron, T. 2011. Potential for designating Protected Areas for conservation and for identifying conservation corridors as part of the planning process of the Mayombe forest TPA: strategic studies thematic report. UNEP-GRASP and IUCN-PACO.

JGI (Jane Goodall Institute) - Congo realized in 2008 an ecological and socio-economic study in the southern part of the Congo component of the Mayombe, including Dimonika BR. JGI has also established the Tchimpounga Nature Reserve and is managing the sanctuary and nature reserve in partnership with the government of Congo (MDDEFE). JGI supports also community engagement, education and research initiatives, mainly in and around Tchimpounga NR.

WCS (Wildlife Conservation Society) - Congo is managing Conkouati-Douli National Park, since it was gazetted in 1999, through its partnership with the government of Congo (MDDEFE).

HELP (Habitat Ecologique et Liberte des Primates) - Congo manages since 1991, through partnership with the government of Congo, a sanctuary and rehabilitation project for orphaned chimpanzees in three islands in Conkouati Lagoon. Since 1996 HELP is also managing a chimpanzee re-introduction and related research project in the Triangle area of the old Conkouati reserve.

The northern part of the Mayombe forest area, between Congo and Gabon overlaps the southern part of the Gamba-Mayumba-Conkouati Landscape, one of 12 Congo Basin Forest Partnership (CBFP) Landscapes, selected as conservation priorities by the Central African Regional Program for the Environment (CARPE), a USAID initiative aimed at promoting sustainable natural resource management in the Congo Basin. It is managed by WCS, through partnership with the governments of Congo and Gabon.

I.1.4.3. Sub-regional initiatives

This project fits into Axe 4 of the *Plan de Convergence* of COMIFAC (Commission des Forets D’Afrique Centrale): Conservation of biological diversity, aiming to strengthen the network of national protected areas and to enhance collaborative management of transboundary protected areas. Three of the four countries sharing the Mayombe forest ecosystems (DRC, Congo and Gabon) are signatories of COMIFAC. The proposed Mayombe forest TPA is listed as one of 11 existing and planned Transfrontier Conservation Areas between signatories of COMIFAC¹⁸.

The Mayombe forest is also one of 17 existing and planned Transfrontier Conservation Areas in the SADC (Southern Africa Development Community) region. The SADC Secretariat has adopted in 2007 a SADC framework for TFCAs¹⁹. Two of the countries sharing the Mayombe forest ecosystems are SADC members (Angola and DRC).

¹⁸ COMIFAC. 2005. Plan de Convergence. See also <http://www.comifac.org/>

¹⁹ Ron, T. 2007. Southern Africa Development Community (SADC) Framework for Transfrontier Conservation Areas (TFCAs) – Issues and Options Report. Presented to the SADC Secretariat with SDC Support.

I.2. METHODOLOGY OF THE ELABORATION OF THIS STRATEGIC PLAN

This document was elaborated through four distinct steps:

Step 1: The elaboration of a draft, based on existing information and documentation, on initial fact-finding missions and on an initial consultation process with the responsible authorities, key stakeholders and partners, as implemented through the preliminary and interim phase of the Mayombe Transfrontier Project²⁰.

Step 2: The revision of this draft, through e-mail-based consultations and finally through consultation with stakeholders at the final consultative technical regional workshop of the current interim project phase.

Step 3: The revision and finalization of an approved version of the Strategic Plan, to be validated by the parties, and that would serve as the guiding document for the Mayombe forest TPA's creation, planning and sustainable management.

I.3. SITUATION ANALYSIS

The following SWOT analysis provides a general preliminary basic rating of current significance of the various factors (including institutional, ecological and management-related factors) to the strategic priority setting. It is based on information collected through initial fact-finding missions and consultation with stakeholders, the responsible authorities, partners and experts, during the Mayombe Transfrontier Project interim phase²¹. More information on the ecological significance, biodiversity, threats and existing conservation efforts, are detailed in the following sections. This analysis rates the significance of specific strengths and weaknesses to the conservation importance and to the current and potential conservation status of the proposed TPA area, as well as the significance of the impact of specific identified threats and opportunities on the potential conservation of the TPA. It thereby indicates the priority aspects to be addressed through this project. The rating is estimated, based on the initial fact-finding process, and therefore the rates applied are general (very high, high, medium, low or very low).

²⁰ For more information see: Ron, T. 2010 - 2011. Mayombe Transfrontier Project. UNEP and IUCN. Mission and technical reports and strategic documents presented following consultancy missions on March 2010, May 2011, and August 2011.

²¹ See: Ron, T. 2010 - 2011. Mayombe Transfrontier Project. UNEP and IUCN. Mission and technical reports and strategic documents presented following consultancy missions on March 2010, May 2011, and August 2011.

Table 1: SWOT situation analysis

Rate of significance: VH=Very High; H=High; M=Medium; L=Low; VL=Very Low

Strengths	Rate	Weaknesses	Rate
Rich biodiversity; rare and endemic species; species of outstanding global importance;	VH	Relatively small size of the forest area, and especially of intact ecosystems;	M
The proposed TPA area partially overlaps with several globally defined conservation priority areas;	L	Dense human population in parts of the area; Population subjected to decades of poverty and armed conflicts impacts, with very limited access to basic services, infrastructures and employment opportunities, resolving to livelihoods that are mostly based on unsustainable harvesting and encroachment;	VH
South-western distribution margin of the Guineo-Congolian center of endemism and the related species of flora and fauna;	VH	Significant differences in ecosystem's integrity and endangered species' survival, between the different components of Mayombe forest, with several "conservation islands" (e.g., in Cabinda);	VH
Political will expressed through the signing of the Cabinda Accord and MoU by DRC, Angola and Congo. Interest expressed by Gabon;	H	Very weak environmental law enforcement and control systems;	VH
Existing Protected Areas in DRC and Congo;	M	Weak institutional capacity to manage PAs;	H
Several site-specific conservation, sustainable management and awareness programmes implemented by the governments and their partners with local stakeholders;	H	Insufficient and unsustainable availability of funding and resources for the initiative;	H
Preliminary experts and technical meetings held; Preliminary strategic study implemented;	M	n-country weak collaboration between stakeholders'	M
		Weak capacity to secure benefits to communities from ecosystems services and from related sustainable livelihoods; Communities fatigue and frustration;	H
		Limited and unequal knowledge-base.	M

Opportunities		Threats	
PA in process of designation in Angola; Significantly increased NR in Congo; Plans for improved management of existing PAs in process;	VH	Decades of severe ecosystems' degradation and heavy utilization of the natural resources; poaching, anarchic logging and encroachment;	VH
Local, national and regional awareness to the importance of the Mayombe forest ecosystems;	H	Commercial poaching and cross-border trade; High demand for wild flora and fauna from the forest, in adjacent urban centers and ports;	VH
Increasing political will and support and cross-border collaboration;	H	armed forces involvement in poaching; patrolling mistakes;	M
International awareness and support;	M	Weak law-enforcement capacity enables easy in-country and cross-border illegal trade in wild flora and fauna;	VH
Several international, national and local NGOs operating in the region;	M	Unsustainable cultivation practices and encroachment;	VH
Potential for cooperation with other stakeholders (non-conservation, e.g., private sector);	M	Human-Wildlife-Conflict (mainly Human-Elephant-Conflict);	H
Existing economic value through sustainable management;	VL	Constructions and development works, without adequate planning and environmental considerations; negative impact on connectivity;	H
Potential economic value through sustainable management (including products' marketing and tourism);	VH	Commercial and anarchic mining; explorations;	M
Cross-border local-level ethnic, lingual, and cultural affinity;	M	Potential significant increase in mining operations;	H
Increased need for cross-border collaboration, due to significant difference between the Mayombe forest components in ecosystem's integrity and endangered species' survival.	VH	Invasive species, <i>Chromolaena odorata</i>	M
Armed forces involvement in law enforcement	M	Instability and insecurity	M

The main identified priorities can be summarized into: integrating poverty alleviation and biodiversity conservation through enhancing sustainable livelihoods, and securing benefits to communities from ecosystems services, as well as increasing significantly the in-country and transboundary law-enforcement and control capacities. Special attention is required to enhancing local communities' engagement in the TPA's sustainable management, e.g., through improving cultivation practices, mitigating Human-Wildlife-Conflicts (HWC), developing alternative sustainable livelihoods and participation in forest rehabilitation and law enforcement efforts.

The expressed and increasing political will and the local, national and regional awareness to the ecological importance of the Mayombe forest ecosystems, should be used to enhance in-country stakeholders' engagement, cross-sectoral and intra-regional cooperation, regional and harmonization of policy and legislation frameworks, and coordinated spatial and land-uses planning. Information on the global importance of the TPA should be widely distributed in order to raise the essential international awareness and support for enabling the achievement of the identified priorities. Financial sustainability, however, should be based on a combination of external support and permanent governmental dedicated budgets. Legislation and policies need to be harmonized and national legislation gaps, related to the specific identified aspects, should be addressed. In order to secure sustainability of the Mayombe forest TPA's management, the implementation of the various activities should be accompanied with building institutional and technical capacity on all relevant aspects, at the local, national and regional levels, with special focus on regional information and experience exchange.

II. THE STRATEGIC PLAN

II.1. VISION AND OBJECTIVES OF THE TPA

The vision guiding the creation and management of the Mayombe forest TPA is²²:

Sustainable management of the Mayombe forest ecosystems, for protecting biodiversity of global importance, and for enhancing socio-economic development, a culture of peace and cooperation in a trans-boundary and post-conflict zone, and beyond.

The general objectives of the Mayombe TPA were identified as:

- a) Protecting and rehabilitating the Mayombe forest ecosystems integrity and biological diversity;
- b) Enhancing socio-economic development and improving living conditions and benefit options of local communities, by creating opportunities for sustainable livelihoods;
- c) Strengthening multi-sectoral cooperation and stakeholders' engagement in sustainable management of the natural resources; and
- d) Promoting cross-border cooperation, exchange and a culture of peace.

II.2. SPATIAL PLANNING

II.2.1. SPATIAL PLANNING OF THE MAYOMBE FOREST TPA, THROUGH A BIOSPHERE RESERVE APPROACH

It is suggested that the whole area of the Mayombe forest, initiating with the southern part between DRC, Angola and Congo, would be designated, planned, managed and protected as one TPA, through a biosphere reserve approach. The detailed and fine-tuning spatial planning of the TPA would be based on a participatory approach of consultation with stakeholders, taking into account both conservation and socio-economic development considerations, and aiming to maximize both in a compatible way, through collaboration of all stakeholders within the area, at local, national and regional levels, as well as with international partners and experts.

The spatial planning of the large TPA would integrate core zones protected strictly for conservation and research, with buffer zones of well-controlled sustainable management and transition zones of various multiple uses with differential disturbances²³. Most of the TFCAs and TPAs in Africa are not registered as Biosphere Reserves, but are planned, zoned and managed through the same general approach.

²² The vision and general objectives of the TPA are based on the results of the consultation process realized through the Interim Phase of the project (See: Ron, T. 2010 - 2011. Mayombe Transfrontier Project. UNEP and IUCN. Mission and technical reports and strategic documents presented following consultancy missions on March 2010, May 2011, and August 2011). The general TPA objectives should not be mixed with the Strategic Objectives below, guiding the operational planning of the TPA creation and management.

²³ UNESCO. 2010. The Seville strategy for biosphere reserves (<http://www.unesco.org/mab/doc/brs/Strategy.pdf>)

The biosphere reserve approach is most suitable if not essential for the Mayombe forest TPA planning, due to the nature of this area that is relatively small, very rich with biodiversity, but also subjected to various human activities and destructive disturbances, and in parts of the area it is rather densely populated. Both biodiversity conservation and local sustainable economic development in the Mayombe forest southern area were defined as national priorities in all three countries that share it²⁴. A biosphere reserve approach can address both in an integrated way, and through the engagement of stakeholders at all levels, and in all aspects of the TPA's planning.

The spatial planning of the TPA would integrate existing land-uses and would be coordinated with national land-use planning processes. The TPA's planning and management will be further supported through creating partnerships with NGOs and the private sector operating in the area. Long-term monitoring programmes will be developed to monitor the conservation status of the TPA, and will be implemented by qualified staff and trained stakeholders, and in cooperation with partners.

II.2.2. THE GEOGRAPHIC BOUNDARIES OF THE PROPOSED MAYOMBE FOREST TPA AREA

The proposed Mayombe forest TPA contains the whole area of the Mayombe forest in the four countries that share it, and its immediate surroundings. Defining the exact limits of the TPA will be determined through negotiations between the governments of the countries that share it, through the Transboundary Ministerial Committee, based on the technical recommendations provided through the Mayombe Transfrontier Project, as would be refined and approved by the Transboundary Technical Committee. The limits of the Mayombe forest TPA will be determined in three distinct phases (map 1):

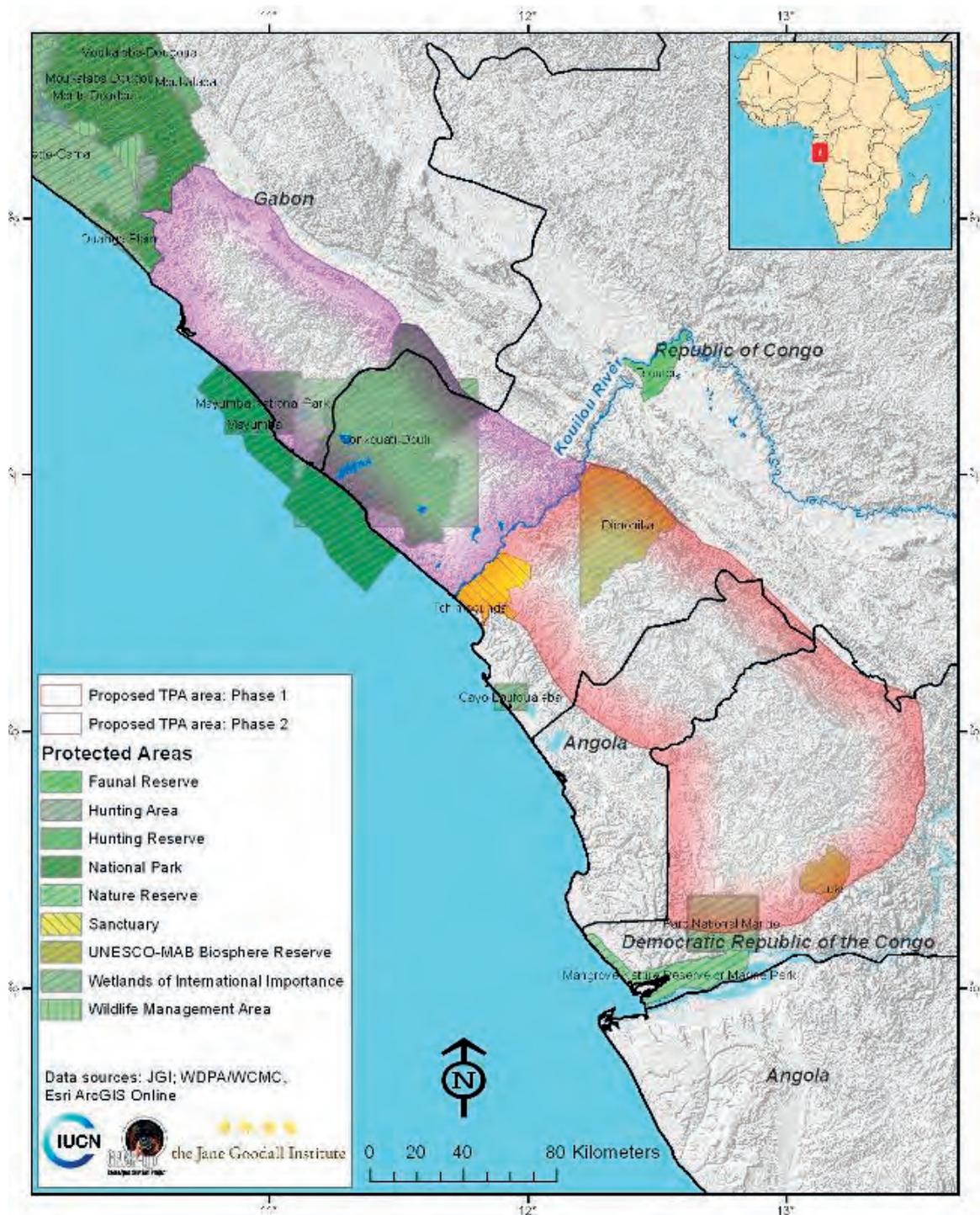
1st phase (first two years): The agreed southern part of the Mayombe forest, between DRC, Angola and Congo, is the geographic focus of the 1st phase of the Mayombe Transfrontier Project. It includes the whole area of the Mayombe forest in the Bas-Fleuve District in Bas-Congo Province, DRC, including all of Luki BR as the TPA's southern-central "corner"; the whole area of the Maiombe forest in Cabinda Province, Angola, including its north-western area of the Planicie and Low Maiombe; and the southern part of the Mayombe forest in the Republic of Congo, in Kouilou District, with the south-western stretch of Niari District. The Kouilou River can mark the northern limit of the 1st phase southern part of the Mayombe forest TPA, which can include all of Dimonika BR as its north-eastern "corner".

2nd phase (years 3-5): The 2nd phase of establishing the Mayombe forest TPA will include the Mayombe forest's northern part between Congo and Gabon. It will encompass the area from Kouilou River to the north-western border of Congo, including all of the Conkouati-Douli NP, and the corresponding Mayumba area in south-west Gabon. The northern part of the Mayombe forest TPA would overlap the geographic northern limits of the Mayombe massif. In order to enable connectivity of protected areas, it is suggested that the northern limit of the TPA will border with the southern limit of Moukalaba-Doudou National Park. However, the exact northern and eastern limits would be determined after the Government of Gabon would be part of the initiative and of the TPA's planning process and a signatory of the MoU.

3rd phase (after year 5): The 3rd phase of establishing the Mayombe forest TPA will aim to include the coastal context in an ecological compatible way. The Mayumba NP in Gabon is a marine and coastal PA, while the Conkouati-Douli NP includes coastal and marine components. The responsible authorities of all three countries that share the southern part of the Mayombe forest have defined the integration of the coastal context and especially the mangrove forests to the west of the Mayombe forest, in the TPA, among their national priorities. The extension of the Mayombe forest TPA area to the west and the inclusion of the coastal context will be the focus of the 3rd phase of establishing the TPA.

²⁴ Ron, T. (Ed). 2011. Mayombe Transfrontier Project. UNEP and IUCN. Technical Workshop Report. Pointe-Noire, 16-17.5.2011.

Map 1 : Phase 1 and 2 Proposed Preliminary Boundaries of the Mayombe forest TPA



Legend: A- TPA proposed zone : 1st phase ; TPA proposed zone : 2nd phase

Protected Areas: Faunal reserve - Hunting area - Hunting reserve - National Parc- Nature reserve - Sanctuary - UNESCO-MAB biosphere reserve- Wetlands of international importance - Wildlife management area.

Data sources: JGI, WDPA/WCMC, Esri Arc online.

I.3. KEY RESULTS AREAS

The Strategic Plan of the Mayombe forest ecosystems is based on the definition of Strategic Objectives (SOs), grouped into Key Results Areas (KRAs), to guide the operational planning of the TPA creation and management. This general format is based on the Transboundary Strategic Plan of the Central Albertine Rift (CAR) Transboundary PA Network²⁵, and adapted to the specific conditions of the Mayombe forest ecosystems.

As noted in the CAR's strategic plan, the Strategic Objectives give direction to the plan and act as a reference for monitoring progress and evaluating performance.

The specific Strategic Objectives and strategies are also based on existing global and regional experience in Transfrontier Conservation Areas (TFCAs) development issues, opportunities, and challenges, mainly in Central and West Africa (e.g., the TNS) and in the SADC region²⁶.

II.3.1. KRA1: LEGAL AND POLICY FRAMEWORKS

In order to create the essential enabling conditions for the establishing and effective management of the TPA, through stakeholders' engagement and regional cooperation, the governments would need to address the relevant country-level legislation and policy gaps, as well as to harmonize the related legislation and policies between them. Related sensitization and capacity building of the juridical systems, relevant government officials, management staff, key stakeholders, and the general public, is also essential.

A comparative and critical review of the existing legal and policy frameworks related to biodiversity conservation and natural resources management in Angola, Congo and DRC, was elaborated through the initial phase of the Mayombe Transfrontier Project. The study provides an analysis of the main country-level gaps in the existing legal and policy frameworks and recommendations for legislation and policies harmonization, as related to the creation and integrated management of the Mayombe forest TPA²⁷.

SO1.1. Legislation and policies harmonized at the regional level, and identified country-level gaps complemented, as essential to enable the joint creation and effective integrated management of the Mayombe forest TPA²⁸.

Strategy 1: Create a joint framework and mechanisms for the coordinated creation and management of the TPA, including: defining the agreed geographic boundaries, vision, goal, objectives, and management plans and mechanisms of the TPA; mechanisms for communication and information exchange; addressing security issues through establishing collaboration with the relevant national

²⁵ Central Albertine Rift Transboundary Protected Area Network, Transboundary Core Secretariat. 2006. Ten Years Transboundary Strategic Plan. ICCN, UWA and ORTPN, supported by IGCP.

²⁶ See, E.g.:

- Sandwith, T., C. Shine, L. Hamilton and D. Sheppard. Series Editor: A. Phillips. 2001. Transboundary Protected Areas for Peace and Cooperation: Best Practice Protected Area Guidelines Series No. 7. WCPA – IUCN;
- Hanks, J. and R. Cronwright. 2006. Pre-feasibility study of the proposed Kavango Zambezi Transfrontier Conservation Area. Transfrontier Conservation Consortium, for PPF, on behalf of the Governments of Angola, Botswana, Namibia, Zambia and Zimbabwe;
- Ron, T. 2007. Southern Africa Development Community (SADC) Framework for Transfrontier Conservation Areas (TFCAs) – Issues and Options Report. Presented to the SADC Secretariat with SDC Support.
- Wilkie, D. and D. Meyers. 2011. Draft report on the Tri-National De Sangha (TNS). For the Tri-National Committee, supported by CTPE and WWF-World Bank Alliance

²⁷ Ecosphere. 2011. Legal and policy frameworks: Thematic Report. Mayombe Transfrontier Project. UNEP and IUCN.

²⁸ This strategic objective fits into Axe 1 of the *Plan de Convergence* of COMIFAC (Commission des Forêts d'Afrique Centrale). See: COMIFAC. 2005. Plan de Convergence. See also <http://www.comifac.org/>

security mechanisms and armed forces; enabling cooperation in law-enforcement, including the creation and effective operation of a joint law-enforcement unit.

Strategy 2: Harmonize the legislation and policies between the countries sharing the Mayombe forest ecosystems (initiating with DRC, Angola and Congo, and later also with Gabon), with focus on coordinating and harmonizing: mechanisms for biodiversity conservation; PAs categorization, designation, and management; stakeholders' engagement; local communities' rights and benefits; EIAs and licensing systems; forestry certificate-based licensing; compatibility of land-uses planning and land-tenure systems to the TPA's objectives; definition of infractions; sanctions and penalties.

Strategy 3: Complement the identified required country-level legislation and policy gaps, including: enabling biodiversity conservation; defining PAs categories and management mechanisms; enabling the development and implementation of CBNRM programmes; enabling stakeholders' engagement and participation in decision-making process; securing local communities' rights and benefits; subjecting development, construction, utilization and extraction initiatives to in-depth environmental impact assessments (EIAs) as a basis for licensing; forestry licensing in accordance with global standards; enabling compatibility of land-uses planning and land-tenure systems to the TPA's objectives; further in-depth analysis of gaps.

Strategy 4: Develop and implement a sensitization and capacity building programme on the relevant national and regional legal and policy frameworks, for: the juridical systems, relevant government officials, management staff, key stakeholders, and the general public.

II.3.2. KRA2: GOVERNANCE AND COMMUNITY RIGHTS

Creating the mechanisms to secure cross-sectoral and intra-regional dialogue, coordination and cooperation, between stakeholders at the local, national and regional levels, and with international partners, is an essential enabling condition for the integrated creation and effective management of a TPA. The capacity to create and effectively manage and protect the Mayombe forest TPA will depend to a large extent on the capacity of the governments sharing the Mayombe forest and their partners to secure stakeholders' engagement and on-going participation in the decision making and implementation processes, fair cost and benefit sharing, and conflict identification and resolution mechanisms. A preliminary plan to support multi-stakeholders' dialogue at local, national and regional levels, as well as a draft grant proposal for enhancing cross-sectoral and intra-regional cooperation in the Mayombe forest TPA, were elaborated through the Mayombe Transfrontier Project²⁹.

For the implementation of the Programme of the Great Mayombe in the component protected areas, the transboundary stakeholders' platform will in view of local contexts, have to suggest mechanisms capable of reinforcing rights, responsibility and benefit sharing in relation to these protected areas.

The Cabinda MoU (2009) specifies the agreed in-country and regional institutional frameworks for collaboration³⁰. However, it was suggested that the governments would consider a more practical and lean structure, using lessons learned from existing experience³¹ (see section II.4.2.).

²⁹ Ron, T. 2011. A plan to support multi-stakeholders dialogue at country level and at regional level. Concept Note. Mayombe Transfrontier Project. UNEP and IUCN.

- Ron, T. 2011. Enhancing cross-sectoral and intra-regional cooperation in the transboundary Mayombe forest ecosystems. Draft Project Proposal. Mayombe Transfrontier Project. UNEP and IUCN.

³⁰ The Governments of Angola, the Republic of Congo and the Democratic Republic of Congo. 2009. MoU for the creation of the Mayombe forest transfrontier conservation area. July 2009, Cabinda, Angola.

³¹ E.g., from the TNS, CAR, SADC TFCA's.

SO2.1. The required institutional frameworks for the creating, planning and effective management of the Mayombe forest TPA, through stakeholders' engagement and regional cooperation, are revised, agreed, installed and operational.

Strategy 1: Define, agree and install the required TPA collaboration institutional structures (Technical Committee/s and Working Groups, Transboundary Ministerial Committee); install the Transboundary Project Coordination Unit.

Strategy 2: Define, plan and install the basic local, national and regional institutional frameworks, staff and facilities required for creating, planning and effectively managing the TPA (including the TPA's Secretariat), and individual PAs.

Strategy 3: Establish agreed mechanisms and network for enabling permanent communication, coordination and information exchange, at the local, national and regional levels, as well as with international partners and similar programmes.

Strategy 4: Enhance the integration of Gabon in the initiative, and the extension of the Mayombe forest TPA to include its northern part.

SO2.2. Stakeholders' engagement in the decision-making and implementation processes of the Mayombe forest TPA's creation, planning and management, is secured at the local, national and regional levels.

Strategy 1: Create mechanisms for securing permanent and adequate stakeholders' representation in consultations at the local, national and regional levels (with special focus on the local communities), and for integrating their results in the TPA's planning processes and Strategic and Management Plans. Consultation mechanisms can be based on simple questionnaires and include remote methods (e.g., website, listserv, emails), on the ground consultations administered by the TPA and national staff and partners, and meetings, as relevant. Cheapest options should be preferred.

Strategy 2: Enhance local-level cross-border communication, collaboration and capacity building through meetings and exchange, including, e.g.: TPA and individual PAs management and law-enforcement staff, local authorities, traditional authorities, community members.

Strategy 3: Develop and implement a comprehensive capacity building programme for leading a participatory approach, and for cross-sectoral and intra-regional conflict resolution.

II.3.3. KRA3: SPATIAL PLANNING AND SUSTAINABLE MANAGEMENT OF THE MAYOMBE FOREST TPA

As indicated above, the spatial planning of the Mayombe forest TPA will be done through a Biosphere Reserve approach. A study suggesting the way forward for the spatial planning of the TPA and proposing identified potential core zones for Protected Areas for conservation and conservation corridors, was elaborated through the initial phase of the Mayombe Transfrontier Project³². A further study analyzing existing land-uses and socio-economic factors, as well as mapping the spatial information and planning, has also been conducted³³.

³² RON, T. 2011. POTENTIAL FOR DESIGNATING PROTECTED AREAS FOR CONSERVATION AND FOR IDENTIFYING CONSERVATION CORRIDORS AS PART OF THE PLANNING PROCESS OF THE MAYOMBE FOREST TPA: THEMATIC REPORT. MAYOMBE TRANSFRONTIER PROJECT. UNEP AND IUCN.

³³ PINTEA, L. (JGI), 2011. SOCIO-ECONOMIC FACTORS, LAND-USES ANALYSIS AND GIS MAPPING, FOR THE PLANNING OF THE MAYOMBE FOREST TPA: THEMATIC REPORT. MAYOMBE TRANSFRONTIER PROJECT. UNEP AND IUCN. (IN PROCESS).

SO3.1. Spatial planning of the Mayombe forest TPA, through a Biosphere Reserve approach.

Strategy 1: Spatial planning, zoning and mapping of the Mayombe forest TPA - based on an extensive consultation process and on existing information on: ecosystems, biodiversity, threats, flagship and umbrella species, connectivity, barriers, existing and planned land-uses, land-tenure, and socio-economic factors - for the fine-tuned planning of identified potential core zones for the designation of Protected Areas for conservation and conservation corridors, as well as buffer zones and transition zones of multiple-uses.

Strategy 2: Integrate existing local and national-levels land-uses planning systems and socio-economic considerations in the coordinated regional TPA's planning, aiming to enhance compatibility, minimize cross-sectoral conflict, and maximize achieving the TPA's conservation and sustainable development objectives.

Strategy 3: Complement identified priority knowledge gaps required for the fine-tuned spatial planning of the TPA, through targeted studies on identified priority knowledge gaps, including targeted studies of flagship species.

SO3.2. Sustainable management and effective protection of the Mayombe forest TPA and of individual PAs and conservation corridors.

Strategy 1: Elaborate an agreed management plan for the TPA, through a participatory approach, and establish the conditions to enable its effective implementation, through collaboration between the governments, stakeholders' engagement, and partnerships with the private sector, national and international NGOs, and international support.

Strategy 2: Elaborate and implement specific management plans for each existing and new PA within the TPA; support the governments and their partners in the implementation of existing management plans of specific PAs; elaborate and implement plans for the management and protection of identified conservation corridors, through partnerships with land-owners, concessionaires, etc.

Strategy 3: Elaborate innovative plans and protocols for the monitoring and mitigation of identified threats, challenges, risks (e.g., safety and security risks, disease risks), sources of conflict and barriers; experiment pilot mitigation methodologies.

Strategy 4: Elaborate and implement programmes for ecosystems' rehabilitation, including, e.g., re-forestation of encroached areas; a mitigation programme of *Chromolaena odorata* invasion;

Strategy 5: Elaborate and implement a long-term programme for monitoring change in conservation and socio-economic factors in the TPA and in individual PAs and conservation corridors.

II.3.4. KRA4: SUSTAINABLE ECONOMIC DEVELOPMENT

Most of the population in the Mayombe forest ecosystems, and especially in the southern part, was subjected to decades of poverty and impacts of armed conflict, with limited access to basic services and facilities. Parts of the area are densely populated, with the population being mixed of original communities and migrating Internally Displaced People and refugees. Local communities in the Mayombe forest ecosystems' area currently rely mainly on unsustainable use of the natural resources for their livelihood, mainly through poaching, fishing, anarchic logging, encroachment, anarchic mining, and involvement in illegal trade. Moreover, unfulfilled expectations resulted with communities' fatigue, frustration and loss of confidence.

The successful creation and effective management of the Mayombe forest TPA must integrate its biodiversity conservation and socio-economic development objectives, through in-country and cross-border cooperation in developing and implementing programmes for poverty alleviation and sustainable local-level economic development. Such programmes can include the strategic development of sustainable alternative livelihoods, including tourism; the elaboration and implementation of best practice cultivation and forestry manuals; and the addressing of specific key issues, such as the mitigation of Human-Wildlife-Conflicts. Specific strategic concepts for generating sustainable alternative livelihoods in Congo and for mitigating Human-Elephant-Conflict in Angola were elaborated through the initial phase of the Mayombe Transfrontier Project³⁴.

CBNRM (Community-Based Natural Resources Management) programmes have been implemented with evident success in several countries in the SADC region, and proposed as desirable mechanism to secure local communities engagement in SADC TFCAs management³⁵. Adequate national legislation and policies are required to enable the implementation of CBNRM programmes, as well as adequate local-level institutional capacity.

Until the required legislation and policies would be adopted by the countries and local level institutional capacities created to enable the development of regionally coordinated CBNRM programmes, existing micro-projects can be strengthened and new pilots initiated to address identified priorities. Pilot projects of alternative sustainable livelihoods with local communities are being developed and implemented by the governments and their partners for several years in some parts of the TPA area³⁶. Partnerships (e.g., with international NGOs, local NGOs, and the private sector) should be enhanced to support existing and new initiatives.

SO4.1. A strategic plan for shifting from unsustainable use of natural resources to sustainable alternative livelihoods, elaborated and implemented with the local communities living in the Mayombe forest TPA's area.

Strategy 1: Develop and implement with local communities and partners (e.g., NGOs, private sector) a long-term plan for securing the communities' engagement and benefits from the TPA creation and sustainable management, through CBNRM programmes and participation in the TPA's protection and rehabilitation throughout the TPA, initiating with pilot micro-projects in selected sites, and with strengthening existing initiatives with partners.

Strategy 2: Elaborate and disseminate specific best practice agriculture, forestry and natural resources' use manuals for the Mayombe forest TPA³⁷, and implement pilots with communities in selected sites.

³⁴ Ron, T. 2011. Analysis of options to address unsustainable use of natural resources, through generating sustainable alternative livelihoods in the Congo component of the Mayombe forest. Concept Note. Mayombe Transfrontier Project. UNEP and IUCN.

- Ron, T. 2011. Strategic analysis of options to address Human-Elephant-Conflict in the Angolan component of the Mayombe forest. Concept Note. Mayombe Transfrontier Project. UNEP and IUCN.

³⁵ See, e.g.:

- IRDNC: www.irdnc.org.na;

- Hanks, J. and R. Cronwright. 2006. Pre-feasibility study of the proposed Kavango Zambezi Transfrontier Conservation Area. Transfrontier Conservation Consortium, for PPF, on behalf of the Governments of Angola, Botswana, Namibia, Zambia and Zimbabwe;

- Ron, T. 2007. Southern Africa Development Community (SADC) Framework for Transfrontier Conservation Areas (TFCAs) – Issues and Options Report. Presented to the SADC Secretariat with SDC Support.

³⁶ E.g. WWF project in Luki BR; planned WWF project in Dimonika BR; JGI project in Tchimpounga NR; WCS project in Conkouati-Douli NP; National conservation efforts and plan in the Maiombe forest, Cabinda, Angola

³⁷ Based on existing regional experience and manuals in similar situations in the region (see, e.g., <http://carpe.umd.edu/>)

Strategy 3: Elaborate a strategic Human-Wildlife-Conflict analysis and plan, implement experimental pilots of selected combinations of mitigation measures, and derive lessons learned for the implementation of a comprehensive HWC study and mitigation programme, with focus on HEC.

Strategy 4: Realize a study to assess the potential and feasibility of developing tourism, in the different components of the TPA and in specific PAs, and for creating economic opportunities through a tourism development plan.

Strategy 5: Realize an economic study for assessing expected costs and benefits of the TPA's creation and sustainable management, including potential benefits from tourism and from products of sustainable livelihoods, and develop several alternative models for securing fair in-country and regional cost and benefit sharing, with focus on securing benefits for the local communities.

II.3.5. KRA5: LAW ENFORCEMENT

Law enforcement has been widely recognized as essential to enabling biodiversity conservation, and especially for the protection of specific threatened species, both at national and transboundary contexts. The TNS (Tri-National de Sangha) report stressed the importance of strengthening the national law enforcement capacities, as a basis for enabling transboundary enforcement as well³⁸.

The concept of the transboundary effort to protect the Mayombe forest, as initiated in 2000, resulted first from information received through stakeholders' consultations in Cabinda, regarding extensive illegal cross-border traffic of wild flora and fauna, from the Angolan component of the forest to the neighboring countries. The first inter-ministerial discussions at that time focused on cooperation in law enforcement. The cross-border traffic is a major concern, resulting from the dramatically differential conservation status of the forest and wildlife populations, in very short distances, combined with rather easy cross-border access and limited enforcement capacity, in the southern part of the Mayombe forest. The proximity of the forest to the large urban centers and ports of Boma, Pointe-Noire, and Cabinda, further increases the demand for commercial poaching and logging. Establishing effective law enforcement capacity, through cross-border cooperation, and through collaboration with the national armed forces and enforcement entities, as well as with local communities and stakeholders, is essential and urgent for the protection of the Mayombe forest and for enabling the long-term survival of its biodiversity, and especially in the southern part.

An agreed solution should be sought between the governments and their partners, for enabling the long term successful operation of the national and regional law-enforcement units, possibly through cooperation with other existing national law-enforcement agencies, and with partners that can secure long-term support³⁹.

Moreover, law enforcement is required to monitor forestry, development, constructions, mining and exploration activities, in accordance with EIAs and adequate licensing, and to prevent and penalize infractions.

³⁸ E.g., Tranquilli, S. et al. 2011. Lack of conservation effort rapidly increases African great ape extinction risk. *Conservation letters* 0 (2011): 1-8. Wiley Periodicals, Inc.

- Wilkie, D. and D. Meyers. 2011. Draft report on the Tri-National De Sangha (TNS). For the Tri-National Committee, supported by CTPE and WWF-World Bank Alliance

³⁹ E.g., as in the TNS example (see footnote 25), where CAWHFI with matching funds from partner NGOs supports anti-poaching activities;

- See also the LAGA experience: www.LAGA-enforcement.org

SO5.1. Reduced illegal exploitation of natural resources and biodiversity and cross-border traffic in the Mayombe forest ecosystems, through strengthened law enforcement capacities and collaboration.

Strategy 1: Recruit, equip and train staff for the protection and sustainable management of each individual PA, including eco-guards from local communities.

Strategy 2: Establish, equip and train in-country law enforcement units to protect the national components of the Mayombe forest and its biodiversity, through cooperation with the national armed forces and law-enforcement entities (e.g., army, police, border police, immigration, customs, foresters), and through involvement of local stakeholders (e.g., community members' participation, private sector support).

Strategy 3: Establish permanent communication and coordination mechanisms between the national law-enforcement units, as well as with relevant regional and international agencies (e.g., INTERPOL)

Strategy 4: Establish, equip and train a regional law-enforcement and intelligence unit for a joint effort to combat cross-border traffic.

Strategy 5: Establish, equip and train special national units for overseeing development, constructions, mining and exploration activities, in accordance with EIAs and adequate licensing, and for preventing and penalizing infractions; Alternatively, establish an independent panel that would include international experts⁴⁰; Collaborate with the national forestry departments for supervising licensed forestry activities.

II.3.6. KRA6: AWARENESS, EDUCATION, AND TECHNICAL CAPACITY BUILDING

The initial phase of the Mayombe Transfrontier Project, as well as the initial efforts in each of the countries, focused to a large extent on raising the awareness of decision makers, stakeholders and partners to the biodiversity and economic importance of the Mayombe forest ecosystems, and to the need for cross-border collaboration in protection, conservation and sustainable management efforts. A strategic comprehensive and concerted awareness and education programme is required to accompany the various aspects of the Mayombe forest TPA's creation, planning and sustainable management. Sensitizing international partners is also essential, for securing support.

In order to secure sustainability, it is essential to identify and complement the technical capacity building requirements at all levels, on all aspects, and to all the relevant target groups, in accordance with a capacity needs assessment and technical capacity building programme. Special focus should be given to equalizing capacities between the TPA's components, through regional peer-assist-based exchange programmes.

SO6.1. All relevant stakeholders in the countries sharing the Mayombe forest TPA, and international partners, are sensitized to the significance of the Mayombe forest ecosystems and to the TPA's objectives, strategies and plans.

Strategy 1: Elaborate and implement a strategic comprehensive and concerted education and awareness and information dissemination programme, at local, national, regional and international levels, including specific programmes for specific target groups (e.g., decision-makers, local communities, foresters, etc).

Strategy 2: Elaborate and implement a specific programme for the integration of environmental education in the formal and informal education systems, at the local level, including the production of educational material.

⁴⁰ Based on IUCN's experience in Mauritania and Guinea Bissau, as well as in the Niger Delta in Nigeria (A.J. Nianogo, pers. Comm).

Strategy 3: Establish partnerships with national and international media channels for the dissemination of information

Strategy 4: Develop and manage a dedicated website of the Mayombe forest initiative as a tool for sensitization, education, information dissemination, and for supporting consultation processes.

SO6.2. Technical capacity of the participants in the TPA's creation, planning and management, enhanced and equalized, at all levels.

Strategy 1: Elaborate and implement a strategic comprehensive and concerted capacity needs assessment and technical capacity building programme, at local, national, and regional levels, including specific short, medium and long-term training and skill building programmes for specific target groups (e.g., government officials, TPA and PAs' staff, law enforcement staff, local NGOs and CBOs, juridical personnel, community members, traditional leaders, community associations, foresters) and on specific aspects of the TPA's management (e.g., leading a participatory planning process, PA management, ecological research and wildlife monitoring, HWC mitigation, project management, law enforcement, related legislation, governance, best practice cultivation methods, leading CBNRM programmes, specific skills for specific sustainable livelihoods, tourism development and related specific skills, certificate-based/best-practice forestry, veterinary aspects, environmental education, business management)

Strategy 2: Elaborate a data base of existing relevant training opportunities in the countries involved and in the region, and match the opportunities as relevant with the identified capacity building needs.

Strategy 3: Develop and implement a peer-assist-based exchange programme for addressing relevant identified capacity needs.

II.3.7. KRA7: FINANCIAL SUSTAINABILITY

The creation and planning process of the Mayombe forest TPA require substantial preliminary investment. The long-term effective management of the TPA requires securing financial sustainability.

SO7.1. Financial sustainability of the Mayombe forest TPA's established and maintained.

Strategy 1: Realize an economic study for assessing expected costs and benefits of the TPA's creation, planning and sustainable management (including, e.g.: planning the TPA through a participatory approach, individual PA's management, institutional frameworks and staff, the specific strategies and activities, potential benefits from tourism and from products of sustainable livelihoods), and develop several alternative models for securing fair and sustainable in-country and regional cost and benefit sharing.

Strategy 2: Mobilize substantial international financial support for the TPA's creation, planning and initial investments.

Strategy 3: Establish partnerships with specific actors for co-financing, for co-management and for joint implementation of specific aspects and activities in specific sites, in the TPA's area.

Strategy 4: Secure sufficient national annual budgets for enabling the long-term effective management of the TPA and of the individual PAs, as well as the on-going employment of the TPA's staff, and the long-term function of the national and regional collaboration institutional frameworks.

II.3.8. KRA 8 : RESEARCH AND ECOLOGICAL MONITORING

The process of creating, planning and managing the TPA of the Mayombe Forest, requires regularly updated data on biodiversity (species and ecosystems) in general, and on the factors that have anthropogenic and non-anthropogenic effect on their conservation. However, so far and despite recent studies, available data are for the most part incomplete.

It is therefore imperative to establish a permanent collection system, and then monitor parameters to get information on the evolution of various components of the future TPA, as well as surrounding areas and threats and obstacles to conservation in this vast area. Such a system will make it possible to determine the impact of actions undertaken and can be enhanced to gradually adjust planning and management decisions.

SO8.1. Establishing a baseline.

Strategy 1. Identification of stakeholders to involve in research and biological monitoring, as well as terms and conditions for their involvement;

Strategy 2. Concerted identification of the most relevant indicators with regard to species, habitats, human environment in surrounding agglomerations and anthropogenic and non-anthropogenic threats (including climate change);

Strategy 3. Establishment of baseline indicators for biological diversity and the socio-economic situation.

SO8.2. Developing and implementing a research and ecological monitoring program

Strategy 1. Holding of workshops for knowledge sharing and collaborative planning, to develop a research and ecological monitoring action plan aimed at complementing what exists in terms of equipment, human resources and products, as well as defining mechanisms for collection, sharing and use of gathered data;

Strategy 2. Development and furnishing of an integrated database (containing indicators on biodiversity, socio-economic situation and threats to ecosystems) and spatial reference.

Strategy 3. Implementation of the research and ecological monitoring action plan, including annual review and planning workshops and communication products for various actors.

Table 2: Estimated timeline for achieving the strategic objectives

Strategic objective/year	1	2	3	4	5
SO1.1. Legislation and policies harmonized at the regional level, and identified country-level gaps complemented, as essential to enable the joint creation and effective integrated management of the Mayombe forest TPA.	X	X	X	X	X
SO2.1. The required institutional frameworks for the creating, planning and effective management of the Mayombe forest TPA, through stakeholders' engagement and regional cooperation, are installed and operational.	X	X	X		
SO2.2. Stakeholders' engagement in the decision-making and implementation processes of the Mayombe forest TPA's creation, planning and management, is secured at the local, national and regional levels.	X	X	X	X	X
SO3.1. Spatial planning of the Mayombe forest TPA, through a Biosphere Reserve approach.	X	X	X	X	X
SO3.2. Sustainable management and effective protection of the Mayombe forest TPA and of individual PAs and conservation corridors.		X	X	X	X
SO4.1. A strategic plan for shifting from unsustainable use of natural resources to sustainable alternative livelihoods, elaborated and implemented with the local communities living in the Mayombe forest TPA's area.	X	X	X	X	X
SO5.1. Reduced illegal exploitation of natural resources and biodiversity, and cross-border traffic, in the Mayombe forest ecosystems, through strengthened law enforcement capacities and collaboration.	X	X	X	X	X
SO6.1. All relevant stakeholders in the countries sharing the Mayombe forest TPA, and international partners, are sensitized to the significance of the Mayombe forest ecosystems and to the TPA's objectives, strategies and plans.	X	X			
SO6.2. Technical capacity of the participants in the TPA's creation, planning and management, enhanced and equalized, at all levels.	X	X	X	X	X
SO7.1. Financial sustainability of the Mayombe forest TPA's established and maintained.	X	X	X	X	X
SO8.1. Establishing a baseline	X	X			
SO8.2. Developing and implementing a research and ecological monitoring program	X	X	X	X	X

II.4. THE STRATEGIC PLAN IMPLEMENTATION FRAMEWORK

II.4.1. TERM AND ACRONYM

The following term and acronym is proposed for approval: **Mayombe Forest Ecosystems Transfrontier Conservation Area: MFE TFCA**. First, it is suggested to replace the term Transboundary Protected Area (TPA) with Transfrontier Conservation Area (TFCA), in order to stress the biosphere reserve approach to the areas' planning, integrating zones that are protected for conservation with buffer and multiple-use transition zones. Second, it is suggested to use the term Mayombe Forest Ecosystems (MFE) to demonstrate that the TFCA would cover the whole Mayombe forest ecosystems area, and not only the high forest of the Mayombe massif.

II.4.2. INSTITUTIONAL FRAMEWORK

The Cabinda MoU (2009) specifies the following agreed in-country and regional institutional frameworks for collaboration⁴¹:

- Transboundary Ministerial Committee;
- Transboundary Technical Committee;
- National Technical Committees;
- National Coordinator;
- Project Director

However, it was suggested that a more practical and lean structure would be considered, and based on existing experience in other TFCAs in the region⁴². The detailed institutional framework would be discussed by stakeholders and adopted by the governments, to be integrated into the operational version of this Strategic Plan.

II.4.2.1. TPA Establishment phase (5 years)

The preliminary and interim phase of the Mayombe Transfrontier Project (2010-2011) was executed by UNEP-GRASP, with financial support from the Norwegian Government, and with IUCN-PACO contracted as the implementing agency, for the three signatory countries of the Cabinda Accord and MoU.

This Strategic Plan of the establishment phase (first 5 years) of the TPA can be executed through the same institutional set-up, or a different one, to be selected by the three governments.

Guiding framework (based on the Cabinda Accord and MoU)⁴³:

- National Technical Committees, with representation of all key stakeholders, to be coordinated by the respective responsible national authority and lead by the National Project Coordinator/Focal Point (to be nominated by the respective Ministers);

⁴¹ The Governments of Angola, the Republic of Congo and the Democratic Republic of Congo. 2009. MoU for the creation of the Mayombe forest transfrontier conservation area. July 2009, Cabinda, Angola.

⁴² E.g., J. Refisch (UNEP/GRASP) proposes a model with only one technical committee (transboundary), and with thematic Working Groups.

- The TNS experience also demonstrates the importance of the transboundary technical committee (Comité Tri-National de Planification et d'Exécution, CTPE) and thematic working groups.

⁴³ This framework is based on the Cabinda Accord and MoU (2009), but can be reviewed by the countries (see footnote 44 above)

- Transboundary Technical Committees, with the National Project Coordinators/Focal Points representing the National Technical Committees;
- Task-specific National and Transboundary Working Groups;
- Transboundary Ministerial Committee - the decision-making entity;

Executing framework:

- Transboundary Project Coordination Unit, responsible for the day-to-day execution of the Strategic Plan (with basic full-time technical staff, to be recruited on qualifications basis, including: a Transboundary Project Coordinator, an Administrator/accountant and a Principal Consultant, as well as International and National consultants and technicians – to be recruited as required for the implementation of specific sub-projects and activities).

The Transboundary Project Coordination Unit can be supervised, as the preliminary and interim project phase, by IUCN (or another international institution/NGO). Alternatively, UNEP-GRASP can supervise the Transboundary Project Coordination Unit directly, contract a sub-regional entity (e.g., ECCAS, RAPAC, etc), or a consortium of institutions, each partner organization coordinating a given thematic (or geographic) areas. This option is based to a large extent on existing experience⁴⁴.

It is expected that the National guiding institutional frameworks and personnel would be co-financed by the respective governments; the Transboundary guiding institutional frameworks would be financed through agreed joint effort of the governments and Project funds, and the executing institutional framework of the Transboundary Project Coordination Unit would be financed by Project funds, to be mobilized.

II.4.2.2. TPA Maintenance phase (after 5 years)

In order to secure sustainability and ownership, the Transboundary Project Coordination Unit would be replaced by the end of the first five years of the TPA establishment phase, by a permanent TPA Secretariat. The TPA Secretariat would then be responsible for the day-to-day execution of all tasks, and would be funded by the governments. Financial sustainability would be established through a TPA fund, based on permanent agreed annual national budgets, as well as on continued international partners' support, to be mobilized, managed and maintained by the TPA Secretariat. The same institutional guiding framework of the National and Transboundary committees and working groups, as would be approved for the TPA establishment phase, would continue to operate during the TPA maintenance phase, though frequency of meetings may be reduced. It should be noted that the TPA Secretariat would have no authority in any of the countries, so that its role would be strictly limited to facilitating and coordinating.

II.4.3. OPERATIONAL IMPLEMENTATION AND COORDINATION

The Transboundary Project Coordination Unit (to be later replaced by the TPA Secretariat) will be responsible for the management of the Strategic Plan's implementation.

⁴⁴ J. Refisch, pers.comm., and see also, e.g.:

- Wilkie, D. and D. Meyers. 2011. Draft report on the Tri-National De Sangha (TNS). For the Tri-National Committee, supported by CTPE and WWF-World Bank Alliance;
- Central Albertine Rift Transboundary Protected Area Network, Transboundary Core Secretariat. 2006. Ten Years Transboundary Strategic Plan. ICCN, UWA and ORTPN, supported by IGCP.

The Transboundary Project Coordination Unit will further facilitate coordination and cooperation of the Strategic Plan's implementation with the various existing initiatives and with the various partners operating in the project area. Cooperation will be enhanced with relevant governmental agencies (in addition to the respective national authorities leading the Mayombe forest TPA process, and including specific PAs' staff). Partnerships will be established with local, national and international NGOs that are managing conservation initiatives and Protected Areas in the Mayombe forest area; with the private sector (mainly, forest concessionaires, but also mining companies, and potentially tourism operators); and with local communities, traditional leadership and communities' associations.

The selected institutional framework (see above) will determine the nature of the partnerships and cooperation. If one entity will be selected to supervise the project implementation for the three governments, then this entity should enhance the formalization of further partnerships through agreements. The aim of such agreements should be to avoid competition and overlap, to enable free but safe information exchange, to increase coordination and collaboration, to identify all the thematic and geographic components that are managed by partners, and to focus activities on jointly identified gaps. Sharing use of facilities and joint employment of project staff can also be agreed, for reducing costs and increasing effectiveness to all.

If, however, the governments will choose that the project would be implemented under the supervision of a coalition of the relevant national institutions/authorities, UNEP/GRASP, and international, regional and local NGOs - an agreement should be developed between all the participating entities, clearly indicating the roles, responsibilities and contributions of each, as well as clear and simple coordination mechanisms between them. An agreed model of partnership and cooperation would be developed. E.g., the CAR model can be used, where each technical area of the transboundary plan has a partner organization as coordinator⁴⁵.

In the northern part of the TPA, the governments of Congo and Gabon have already established institutional frameworks and partnerships with NGOs and the private sector, or are in the process of developing and formalizing them, and conservation work is much more advanced than in the southern part. Innovative solutions should be sought for enhancing partnerships and enabling coordination and collaboration of these existing and planned initiatives, with the Mayombe TPA process.

A Project Proposal for enhancing cross-sectoral and intra-regional cooperation in the conservation and sustainable management of the Mayombe forest ecosystems, was elaborated for submission to donors, through the Mayombe Transfrontier Project interim phase (2011).

It is expected that further project proposals would be elaborated, to address identified gaps, and submitted to donors, by the Transboundary Project Coordination Unit, and in coordination with the partners. UNEP/GRASP is leading the elaboration and promotion of a GEF/UNEP and a REDD+ project proposals.

To strengthen the regional cooperation, further coordination and collaboration would be established with specific country level and regional initiatives overlapping all or parts of the Mayombe forest area, (e.g., CARPE-CBFP, SADC-TFCAs framework, COMIFAC).

The signatory Governments of the Cabinda Accord and MoU would oversee and guide the periodic revision and development of the Strategic Plan. Each government, with the support of its partners, is responsible for the planning and implementation of activities in its respective component of the TPA, in coordination with the overall Strategic Plan.

⁴⁵ See footnote 49

II.5. MONITORING FRAMEWORK

The Mayombe Transboundary Coordination Unit would monitor the overall achieving of the Strategic Objectives, on a semestrial basis. This coordinated monitoring would be used as a basis for the on-going identification of gaps in the implementation of the Strategic Plan, and for the elaboration of specific project proposals to complement them.

Participatory evaluation (measuring performance of conservation and livelihood/development activities at a landscape scale by assessing changes in the natural capital, social capital, human capital, physical capital, and financial capital)⁴⁶, can possibly also be exercised at the end of the first two years and again at the end of the five years implementation of the plan.

The preliminary logframe for the monitoring of the Strategic Plan implementation presented here (Table 3), would be further discussed and elaborated through consultation, to be integrated into the operational version of the Strategic Plan.

⁴⁶ Sayer, J.A. et al. 2006. Assessing environment and development outcomes in conservation landscapes. *Biodiversity Conservation*. (DOI 10.1007/s10531-006-9079-9)

- Endamana, D. et al. 2010. A framework for assessing conservation and development in a Congo Basin Forest Landscape. *Tropical Conservation Science* Vol.3 (3):262-281

Table 3: Logframe for the monitoring of the Strategic Plan implementation

KRA	Strategic Objective	Indicator	Means of verification	Stakeholders
KRA1: Legal and policy frameworks	SO1.1. Legislation and policies harmonized at the regional level, and identified country-level gaps complemented, as essential to enable the joint creation and effective integrated management of the Mayombe forest TPA.	<ul style="list-style-type: none"> - Identified national legislation gaps complemented by end of year 3 - Legislation and policies harmonized, by end of year 3 	<ul style="list-style-type: none"> - New national legislation approved - Harmonized policy document 	Mins Env.; Line Ministries; Parliaments; TPA staff, Project coordination
KRA2: Institutional frameworks and a participatory approach	SO2.1. The required institutional frameworks for the creating, planning and effective management of the Mayombe forest TPA, through stakeholders' engagement and regional cooperation, are installed and operational.	<ul style="list-style-type: none"> - Identified National and transboundary Institutional frameworks installed by end of year 3 	<ul style="list-style-type: none"> - Identified institutional frameworks functional 	Mins Env.; Line Ministries; Project coordination; TPA staff, Local stakeholders' representation
SO2.2. Stakeholders' engagement in the decision-making and implementation processes of the Mayombe forest TPA's creation, planning and management, is secured at the local, national and regional levels.		<ul style="list-style-type: none"> - Consultation, communication and coordination mechanisms operational by end of year 3 - Participatory approach and conflict resolution training implemented by end of year 4 	<ul style="list-style-type: none"> - Stakeholders inputs and concerns integrated in the Strategic Plan and specific projects 	Mins Env.; Project coordination; Local stakeholders' representation, TPA staff

KRA	Strategic Objective	Indicator	Means of verification	Stakeholders
KRA3: Spatial planning and sustainable management of the Mayombe forest TPA	SO3.1. Spatial planning of the Mayombe forest TPA, through a Biosphere Reserve approach.	<ul style="list-style-type: none"> - Spatial plan and mapping, with zoning and identified PAs and corridors finalized by end of year 4 	<ul style="list-style-type: none"> - Spatial plan and map 	Mins Env.; Line Ministries; Project coordination; NGOs, Private sector, Local stakeholders, TPA staff
	SO3.2. Sustainable management and effective protection of the Mayombe forest TPA and of individual PAs and conservation corridors.	<ul style="list-style-type: none"> - TPA management plan, specific PA's management plans, and specific management programmes approved and implemented by end of year 5 	<ul style="list-style-type: none"> - Approved Management Plans 	Mins Env.; Line Ministries; Project coordination; NGOs, Private sector, Local stakeholders, TPA staff
KRA4: Sustainable economic development	SO4.1. A strategic plan for shifting from unsustainable use of natural resources to sustainable alternative livelihoods, elaborated and implemented with the local communities living in the Mayombe forest TPA's area.	<ul style="list-style-type: none"> - Strategic Plan approved by end of year 1 - At least three pilot livelihood micro-projects, three pilot conservation interventions, and one HWC pilot, successfully implemented in each country, by end of year 5 	<ul style="list-style-type: none"> - Approved strategic plan - Approved best practice manuals - Activity reports 	Mins Env.; Local communities Project coordination; NGOs, Private sector, Forestry and Agriculture Depts, TPA staff

KRA	Strategic Objective	Indicator	Means of verification	Stakeholders
KRA5: Law enforcement	SO5.1. Reduced illegal exploitation of natural resources and biodiversity, and cross-border traffic, in the Mayombe forest ecosystems, through strengthened law enforcement capacities and collaboration.	<ul style="list-style-type: none"> - Protocol approved by end of year 1 - National and joint Transboundary Law Enforcement Units installed and operational by end of year 4 - At least four major successful enforcement operations implemented in each country, and four cross-border operations, annually from year 3 	<ul style="list-style-type: none"> - Approved protocol - Activity reports 	<p>Mins Env.; National law enforcement agencies, Local communities, Project coordination; NGOs, TPA staff</p>
KRA6: Awareness, education, and technical capacity building	SO6.1. All relevant stakeholders in the countries sharing the Mayombe forest TPA, and international partners, are sensitized to the significance of the Mayombe forest ecosystems and to the TPA's objectives, strategies and plans.	<ul style="list-style-type: none"> - Strategic education Programmes elaborated by end of year 1 - At least 2 specific awareness programmes, and one educational programme implemented in each country by end of year 3 - Information on the Mayombe forest TPA published in at least two media channels in each country and one international channel by end of year 3 - Website established and managed by end of year 3 	<ul style="list-style-type: none"> - Programme approved - Activity reports - Media publications - Website operational 	<p>Mins Env.; Project coordination; NGOs, Local stakeholders, TPA staff</p>

KRA	Strategic Objective	Indicator	Means of verification	Stakeholders
	SO6.2. Technical capacity of the participants in the TPA's creation, planning and management, enhanced and equalized, at all levels.	Strategic capacity needs assessment and capacity building programme elaborated by end of year 1 - At least 5 specific training and exchange programmes implemented in each country annually	<ul style="list-style-type: none"> - Strategic programme approved - Activity reports - Trainees capacity monitoring 	Mins Env.; Line Ministries, NGOs, CBOs, Local communities, TPA staff, law enforcement staff, foresters
KRA7: Financial sustainability	SO7.1. Financial sustainability of the Mayombe forest TPA's established and maintained.	<ul style="list-style-type: none"> - Economic study and financial protocols elaborated and implemented by end of year 5 	<ul style="list-style-type: none"> - Study and protocols approved - Financial reports 	Mins Env.; Local stakeholders, Project coordination, TPA staff, Donors
KRA8 : Research and biomonitoring	SO8.1. Establishing a baseline	<ul style="list-style-type: none"> - Number of relevant actors involved - Number and quality of indicators identified - Informed baseline 	Database software	Research centers; Universities ; Min. of Env.; Communities Locals ; Project coordination; Local and international NGOs; Private sector; Forestry and Agriculture Services; TPA staff.
	SO8.2: Developing and implementing a research and ecological monitoring program	<ul style="list-style-type: none"> - A befitting action plan available - Integrated database available and updated - Number of communication products disseminated - Number of outputs of the action plan taken into consideration in the planning document 	Reports of the research and biological and socio-economic monitoring Program	Research centers; Universities ; Min. of Env.; Communities Locals ; Project coordination; Local and international NGOs; Private sector; Forestry and Agriculture Services; TPA staff.

II.6. ESTIMATED BUDGET

The cost of the implementation of the strategic plan is estimated at 22,85 million USD, of which 9.275 will be needed for the first two years. More details are provided in Annex III.

Table 4. Budget Summary for the first five years

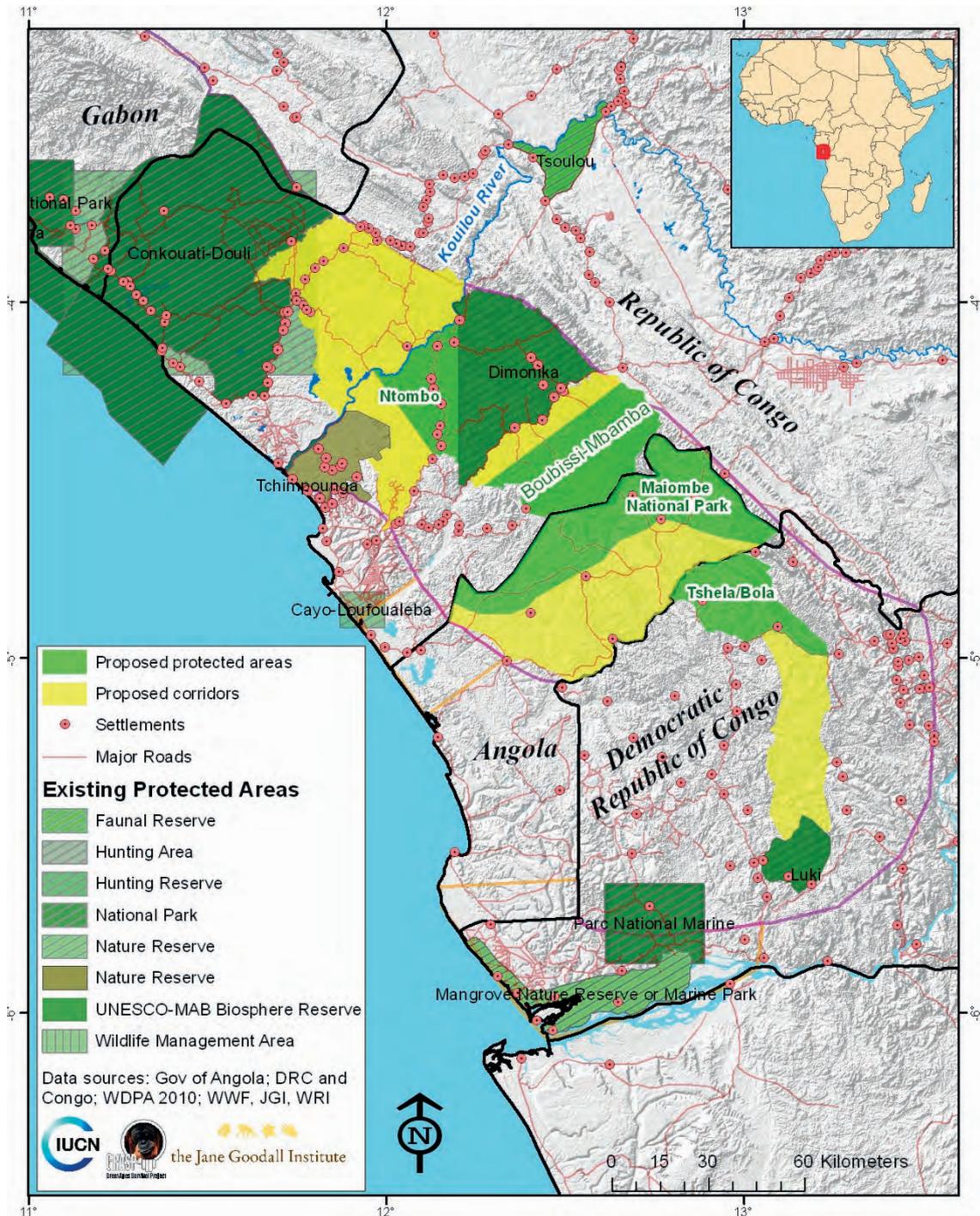
Strategic Objective	Total
SO1.1	300 000
SO2.1	2 900 000
SO2.2	380 000
SO3.1	4 350 000
SO3.2	4 500 000
SO4.1	4 000 000
SO5.1	2 130 000
SO6.1	450 000
SO6.2	1 660 000
SO7.1	430 000
SO8.1	500 000
SO8.2	1 250 000
Total	22 850 000

ANNEX I. Existing and potential Protected Areas for conservation and conservation corridors in the Mayombe forest TPA area, in DRC, Angola and Congo⁴⁷

Country	Existing Protected Areas for conservation	Proposed Protected Areas for conservation	Potential conservation corridors
DRC	1. Luki BR	1. Tshela/Bola forest	1. Luki-Tshela/Bola forest
Angola	1. Maiombe National Park (in designation process)	1. Maiombe National Park: north and east parts of the NP	1. The whole area of the Maiombe forest in Cabinda
Congo	1. Dimonika BR 2. Conkouati-Douli NP 3. Tchimpounga NR	1. Boubissi-Mbamba forest 2. Ntombo forest	1. Cabinda-Banga-Mt. Bamba 2. Banga-Mt.Bamba-Dimonika 3. Dimonika-Nkola forest-Conkouati 4. Dimonika-Ntombo forest-Tchimpounga 5. Conkouati-Mayumba (Gabon)
Gabon	1. Mayumba NP	To be studied	To be studied

⁴⁷ FOR MORE INFORMATION SEE: RON, T. 2011. POTENTIAL FOR DESIGNATING PROTECTED AREAS FOR CONSERVATION AND FOR IDENTIFYING CONSERVATION CORRIDORS AS PART OF THE PLANNING PROCESS OF THE MAYOMBE FOREST TPA: THEMATIC REPORT. MAYOMBE TRANSFRONTIER PROJECT. UNEP AND IUCN.

Map 2: Existing and Proposed Protected Area and Potential Corridors within Mayombe TPA



Legend: Proposed protected areas ; Proposed corridors ; Settlements ; Major roads

Existing protected areas: Faunal reserve - Hunting area - Hunting reserve - National Parc- Nature reserve - Nature reserve - UNESCO-MAB biosphere reserve- Wildlife management area.

Data sources: Gov. Angola, DRC and Congo ; WDPa 2010, WWF ; JGI ; WRI

ANNEX II. Stakeholders’ identification and categorization

Stakeholders are all the entities or individuals who either impact the referred area and its management or are impacted by them, or both. Stakeholders are categorized in accordance with the importance of their engagement in the Transfrontier Protected Area planning and management processes.

Stakeholders’ category	Category definition	Stakeholders
A	Stakeholders that lead the processes for the creating, planning and management of the Mayombe forest TPA	<ul style="list-style-type: none"> - The Governments of Angola, Congo, DRC and Gabon: The Ministries of Environment - Protected Areas authorities and staff - Local authorities: Provincial/District Governments, Municipal Administrations - Traditional authorities - IUCN - UNEP
B	Stakeholders that must be consulted and engaged throughout the decision making and implementation processes	<ul style="list-style-type: none"> - Other relevant Governmental Ministries and Departments (Forestry, Agriculture, Tourism, Mining, Research, Planning and Development, Defense, Interior, Education) - Local communities
C	Stakeholders that would be good to consult and involve throughout the decision making and implementation processes	<ul style="list-style-type: none"> - Private sector: logging, mining, tourism, agriculture and livestock associations - Local NGOs - International NGOs (Congo: WCS, JGI, HELP, WWF; DRC: WWF) - Religious authorities (churches) - Academic and research institutes - Individual experts - The Government of Norway (donor country) - Other potential donors
D	Stakeholders that do not need to be consulted but need to be informed	<ul style="list-style-type: none"> - The general public in all four countries - Potential visitors/tourists in the future TPA

ANNEX III. Expected outputs and main activities to be implemented during the first two years of the strategic plan’s implementation

The expected outputs and main activities proposed for the first two years of the Strategic Plan’s implementation are aimed at enhancing the achievement of the respective Strategic Objectives, as defined through the Strategic Plan, and grouped into Key Results Areas (in addition to KRA0: Project management). Of course, it is not expected that the Strategic Objectives would be fully achieved during these first two years. Rather, the most urgent requirements would be addressed during this first phase.

SP (5 years)	Strategic Objective (5 years)	Expected outputs (first 2 years)	Main activities (first 2 years)
SP0: Project management	SO0.1. The implementation of the Strategic Plan effectively managed.	0.1.1 The basic institutional framework for the implementation of the Strategic Plan installed and functions effectively.	<p>0.1.1.1. Install the Project Coordination Unit for effective management of the day-to-day implementation of the Strategic Plan</p> <p>0.1.1.2. Establish working conditions to facilitate implementation of activities (e.g., facilitating administrative conditions; logistics; facilities; team security and safety; facilitated immigration)</p> <p>0.1.1.3. Establish cooperation agreements and partnerships with relevant national and local governmental departments, international, regional and national NGOs and institutions, private sector and other partners, for enabling coordinated implementation of activities; Realize a regional coordination and consultation workshop with stakeholders and partners</p>
SP1: Legal and policy frameworks	SO1.1. Legislation and policies harmonized at the regional level, and identified country-level gaps complemented, as essential to enable the joint creation and effective integrated management of the Mayombe forest TPA.	1.1.1. Legislation and policies harmonization decisions adopted by the 3 governments, as essential to enable the joint TPA process.	<p>1.1.1.1 Agree on joint frameworks, mechanisms and policies, on all aspects related to enabling the creating and effective management of the TPA.</p> <p>1.1.1.2. Propose a time table for the harmonization of the relevant national legislation between the countries.</p> <p>1.1.1.3. Inform and sensitize stakeholders about the adopted legislation and policies harmonization decisions.</p>

SP (5 years)	Strategic Objective (5 years)	Expected outputs (first 2 years)	Main activities (first 2 years)
SP2: Institutional frameworks and a participatory approach	SO2.1. The required institutional frameworks for the creating, planning and effective management of the Mayombe forest TPA, through stakeholders' engagement and regional cooperation, are installed and operational.	1.1.2. Identified national legislation and policy gaps validated; national legislation processes initiated.	<p>1.1.2.1. Support the governments in initiating the process for the elaboration and adoption of identified legislation and policy gaps, at the national level (e.g., on BD conservation; PAs; communities' rights; land-uses planning; land-tenure systems; EIAs and licensing; forestry; infractions, sanctions and penalties, etc).</p> <p>1.1.2.2. Sensitize stakeholders about relevant new legislation and policies (with special focus on specific target groups, e.g., PA staff, juridical systems, private sector, communities).</p>
	SO2.2. Stakeholders' engagement in the decision-making and implementation processes of the Mayombe forest TPA's creation, planning and management, is secured at the local, national and regional levels.	2.1.1. The TPA coordination institutional frameworks agreed and validated.	<p>2.1.1.1. Install and support the institutional TPA coordination frameworks that will be agreed (committees, working groups).</p> <p>2.1.1.2. Support initiating the establishment of the TPA Secretariat, in a view to replace the Coordination Unit by the end of year 5.</p> <p>2.1.1.3. Initiate supporting the national authorities in installing and capacitating the local and national institutional frameworks, staff and facilities required for creating, planning and effectively managing the respective national components of the TPA and individual PAs.</p> <p>2.1.1.4. Install agreed cheapest mechanisms of permanent communication at the local, national and regional levels, as well as with international partners, and with similar programmes in the region.</p> <p>2.1.1.5. Initiate the integration of Gabon into the initiative, and the extension of the Mayombe forest TPA to include its northern part.</p>
		2.2.1. Periodic stakeholders' consultations integrated into the decision-making and planning processes.	<p>2.2.1.1. Implement periodic consultations with stakeholders (with special focus on the local communities); integrate results into the decision-making and planning process.</p> <p>2.2.1.2. Develop and implement a capacity building programme for leading a participatory approach, and for cross-sectoral and intra-regional conflict resolution.</p>

SP (5 years)	Strategic Objective (5 years)	Expected outputs (first 2 years)	Main activities (first 2 years)
<p>SP3: Spatial planning and sustainable management of the Mayombe forest TPA</p>	<p>SO3.1. Spatial planning of the Mayombe forest TPA, through a Biosphere Reserve approach.</p> <p>SO3.2. Sustainable management and effective protection of the Mayombe forest TPA and of individual PAs and conservation corridors.</p>	<p>3.1.1. Spatial planning of the TPA in progress.</p> <p>3.2.1. Sustainable management of the TPA initiated.</p>	<p>3.1.1.1. Support the national authorities in implementing the spatial planning, zoning and mapping of the Mayombe forest TPA, through an extensive consultation process and in coordination with existing local and national-levels land-uses plans.</p> <p>3.1.1.2. Support the complementing of identified priority knowledge gaps required for the fine-tuned spatial planning of the TPA, through targeted studies; implement joint surveillance and ecological monitoring activities, based on joint training of local stakeholders and PA staff, and with partners' support.</p> <p>3.1.1.3. Elaborate and initiate implementing studies and conservation plans of the identified flagship species (lowland gorillas, chimpanzees, and forest elephants), with focus on connectivity, and with partners' support.</p> <p>3.2.1.1. Support the national authorities in initiating the elaboration of a management plan for the TPA, through a participatory approach.</p> <p>3.2.1.2. Support the national authorities in elaborating plans and protocols for the monitoring and mitigation of specific identified threats, challenges and risks (e.g., safety and security risks, disease risks), sources of conflict and barriers; integrate existing regional experience with innovative solutions adapted to the specific situation; experiment pilot mitigation methodologies.</p> <p>3.2.1.3. Support local authorities and communities and promote partnerships for implementing activities of ecosystems' rehabilitation (e.g., re-forestation; mitigation of Chromolaena odorata invasion).</p>

SP (5 years)	Strategic Objective (5 years)	Expected outputs (first 2 years)	Main activities (first 2 years)
		<p>3.2.2. Protection of individual PAs and conservation corridors enhanced.</p>	<p>3.2.2.1. Support the national authorities in elaborating and implementing management plans for individual PAs and identified conservation corridors, and promote partnerships for supporting conservation and management of specific PAs and corridors.</p>
<p>SP4: Sustainable economic development</p>	<p>SO4.1. A strategic plan for shifting from unsustainable use of natural resources to sustainable alternative livelihoods, elaborated and implemented with the local communities living in the Mayombe forest TPA's area.</p>	<p>4.1.1. Sustainable alternative livelihoods enhanced, resulting with decreased ecosystems degradation and biodiversity loss.</p>	<p>4.1.1.1. Support the national authorities in establishing the enabling conditions for the implementation of CBNRM programmes 4.1.1.2. Support local authorities and communities and promote partnerships for developing and implementing selected micro-projects, including support to existing initiatives 4.1.1.3. Elaborate and disseminate simple best practice agriculture, forestry and natural resources' use manuals for the Mayombe forest TPA (integrating existing regional experience with innovative solutions adapted to the specific situation); implement pilots with local authorities, communities and partners in selected sites. 4.1.1.4. Elaborate a strategic HWC analysis and plan (integrating existing regional experience with solutions adapted to the specific situation); Implement experimental HEC mitigation pilots in Angola and Congo, with regional (SADC) partners' technical support.</p>
<p>SP5: Law enforcement</p>	<p>SO5.1. Reduced illegal exploitation of natural resources and biodiversity and cross-border traffic in the Mayombe forest ecosystems, through strengthened law enforcement capacities and collaboration.</p>	<p>5.1.1. National law enforcement capacity enhanced, resulting with reduced biodiversity loss.</p>	<p>5.1.1.1. Support the national authorities in initiating the establishing, equipping and training of law enforcement units in the national components of the Mayombe forest, and in individual PAs; promote cooperation with the national armed forces and law-enforcement entities, with local stakeholders and with supporting partners. 5.1.1.2. Support the national authorities in building capacity to oversee forestry, development, constructions, mining and exploration activities, in accordance with EIAs and adequate licensing.</p>

SP (5 years)	Strategic Objective (5 years)	Expected outputs (first 2 years)	Main activities (first 2 years)
SP6: Awareness, education, and technical capacity building	SO6.1. All relevant stakeholders in the countries sharing the Mayombe forest TPA, and international partners, are sensitized to the significance of the Mayombe forest ecosystems and to the TPA's objectives, strategies and plans.	5.1.2. Transboundary cooperation in law enforcement enhanced, resulting with reduced cross-border traffic and biodiversity loss. 6.1.1. Stakeholders sensitized and information disseminated	5.1.2.1. Establish permanent communication and coordination mechanisms between the national law-enforcement units, as well as with relevant regional and international agencies (e.g., INTERPOL) 5.1.2.2. Mobilize partners' support to establishing, equipping and training a core regional law-enforcement and intelligence unit to support a joint effort to combat cross-border traffic. 6.1.1.1. Elaborate and implement a strategic comprehensive and concerted education, awareness and information dissemination programme, at all levels, including specific programmes for specific target groups (e.g., decision-makers, local communities, foresters, etc). 6.1.1.2. Establish partnerships with national and international media channels for the dissemination of information. 6.1.1.3. Develop and manage a dedicated website of the Mayombe forest initiative as a tool for sensitization, education, information dissemination, and for supporting consultation processes.
	SO6.2. Technical capacity of the participants in the TPA's creation, planning and management, enhanced and equalized, at all levels.	6.2.1. Technical capacity of TPA's staff and stakeholders strengthened, resulting with enhanced effective management sustainability.	6.2.1.1. Elaborate a strategic comprehensive technical capacity needs assessment and a capacity building and training programme, at all levels; initiate implementing priority skill-building and training programmes. 6.2.1.2. Elaborate a data base of existing relevant training opportunities in the countries involved and in the region, and match the opportunities as relevant with the identified capacity building needs. 6.2.1.3. Implement peer-assist-based capacity building exchange programmes, including workshops of local-level cross-border experience exchange (e.g., for PAs staff, law-enforcement staff, local authorities, communities).

SP (5 years)	Strategic Objective (5 years)	Expected outputs (first 2 years)	Main activities (first 2 years)
SP7: Financial sustainability	SO7.1. Financial sustainability of the Mayombe forest TPA's established and maintained.	7.1.1. Funding secured to enable the implementation of the 5 years Strategic Plan; long-term financial sustainability promoted.	<p>7.1.1.1. Negotiate and agree on funding and co-funding for the process between the three Governments, UNEP, IUCN, and co-partners, including at least two external donors</p> <p>7.1.1.2. Finalize the GEF and REDD+ project proposals elaboration and validation for submission, with UNEP and IUCN technical support.</p> <p>7.1.1.3. Elaborate specific thematic proposals (at least 4) for approval and submission to potential donors.</p>
SP8: Research and biomonitoring	SO8.1. Establishing a baseline	8.1.1. Obtaining baseline data	<p>8.1.1.1 Identification of stakeholders to involve in research and biological monitoring, as well as terms and conditions for their involvement;</p> <p>8.1.1.2 Concerted identification of the most relevant indicators with regard to species, habitats, human environment in surrounding agglomerations and anthropogenic and non-anthropogenic threats (including climate change);</p> <p>8.1.1.3 Establishment of baseline indicators for biological diversity and the socio-economic situation.</p>
	SO8.2. Developing and implementing a research and ecological monitoring program	8.2.1. Action plan operational with the involvement of relevant actors	<p>8.2.1.1 Holding of workshops for knowledge sharing and collaborative planning, to develop a research and ecological monitoring action plan aimed at complementing what exists in terms of equipment, human resources and products, as well as defining mechanisms for collection, sharing and use of gathered data;</p> <p>8.2.1.2 Development and furnishing of an integrated database (containing indicators on biodiversity, socio-economic situation and threats to ecosystems) and spatial reference.</p> <p>8.2.1.3 Implementation of the research and ecological monitoring action plan, including annual review and planning workshops and communication products for various actors.</p>

ANNEX IV. Estimated timeline of activities to be implemented during the first two years of the strategic plan’s implementation

Note that some of the activities would only initiate during the first two years of the Strategic Plans’ implementation and would continue during the next three years phase.

Year	Year 1				Year 2			
Activity/Quarter	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
0.1.1.1.	X							
0.1.1.2.	X	X						
0.1.1.3.	X	X	X	X	X	X		
1.1.1.1.	X	X	X	X	X	X	X	X
1.1.1.2.			X	X	X	X	X	X
1.1.1.3.					X	X	X	X
1.1.2.1.		X	X	X	X	X	X	X
1.1.2.2.					X	X	X	X
2.1.1.1.		X	X	X	X			
2.1.1.2.						X	X	X
2.1.1.3.	X	X	X	X	X	X	X	X
2.1.1.4.		X	X	X	X			
2.1.1.5.			X	X	X	X	X	X
2.2.1.1.	X	X	X	X	X	X	X	X
2.2.1.2.	X	X	X					
3.1.1.1.	X	X	X	X	X	X	X	X
3.1.1.2.		X	X	X	X	X	X	X
3.1.1.3.				X	X	X	X	X
3.2.1.1.					X	X	X	X
3.2.1.2.					X	X	X	X
3.2.1.3.					X	X	X	X
3.2.2.1.					X	X	X	X
4.1.1.1.		X	X	X	X	X	X	X
4.1.1.2.		X	X	X	X	X	X	X
4.1.1.3.		X	X	X	X	X	X	X
4.1.1.4.		X	X	X	X	X	X	X
5.1.1.1.	X	X	X	X	X	X	X	X
5.1.1.2.				X	X	X	X	X
5.1.2.1.			X	X	X	X		
5.1.2.2.		X	X	X	X	X	X	X
6.1.1.1.		X	X	X	X	X	X	X
6.1.1.2.		X	X	X	X	X	X	X
6.1.1.3.			X	X	X	X	X	
6.2.1.1.	X	X	X	X	X	X	X	X
6.2.1.2.		X	X	X				
6.2.1.3.		X	X	X	X	X	X	X
7.1.1.1.	X	X	X	X				
7.1.1.2.	X	X	X	X				
7.1.1.3.				X	X	X	X	X
8.1.1.1.	X							
8.1.1.2.		X	X					
8.1.1.3.			X	X				
8.2.1.1.				X	X			
8.2.1.2.				X	X			
8.2.1.3.						X	X	X

ANNEX V. Estimated budget for the first 5 years

Strategic objectives	Total (5 years)					
	1	2	3	4	5	
SO1.1. Legislation and policies harmonized at the regional level, and identified country-level gaps complemented	80 000	80 000	70 000	20 000	20 000	300 000
SO2.1. The required institutional frameworks are installed and operational.	700 000	600 000	600 000	500 000	500 000	2 900 000
SO2.2. Stakeholders' engagement in the decision-making and implementation processes, is secured at the local, national and regional levels.	70 000	75 000	80 000	80 000	75 000	380 000
SO3.1. Spatial planning of the Mayombe forest TPA, through a Biosphere Reserve approach.	1 100 000	1 100 000	950 000	600 000	600 000	4 350 000
SO3.2. Sustainable management and effective protection of the Mayombe forest TPA and of individual PAs and conservation corridors.	950 000	950 000	950 000	850 000	800 000	4 500 000
SO4.1. A strategic plan for shifting from unsustainable use of natural resources to sustainable alternative livelihoods, elaborated and implemented with local communities	600 000	800 000	900 000	900 000	800 000	4 000 000
SO5.1. Reduced illegal exploitation of natural resources and biodiversity and cross-border traffic in the Mayombe forest ecosystems, through strengthened law enforcement capacities and collaboration.	400 000	420 000	440 000	450 000	420 000	2 130 000
SO6.1. All relevant stakeholders in the countries sharing the Mayombe forest TPA, and international partners, are sensitized to the significance of the Mayombe forest ecosystems and to the TPA's objectives, strategies and plans.	90 000	90 000	90 000	90 000	90 000	450 000
SO6.2. Technical capacity of the participants enhanced and equalized, at all levels.	400 000	400 000	400 000	250 000	210 000	1 660 000
SO7.1. Financial sustainability established and maintained.	80 000	90 000	90 000	90 000	80 000	430 000
SO8.1. Establishing a baseline for indicators of biological diversity and the socio-economic situation	150 000	350 000	0	0	0	500 000
SO8.2. Developing and implementing a research and ecological monitoring program	150 000	350 000	0	0	0	500 000
General total	4 670 000	4 965 090	4 870 000	4 230 000	3 995 000	22 850 000

