

CHAPTER 10

PROTECTED AREA MANAGEMENT IN CBFP LANDSCAPES: TAKING STOCK

Kenneth Angu*, *Cyril Pélissier*, ****Nicodème Tchamou*

IUCN*, *WWF*, ****USAID/CARPE*

Introduction and context

In Africa, protected areas (PAs) provide an important land use option that can deliver conservation results and support sustainable development and poverty alleviation. Establishing effective systems of PAs across the Congo Basin is a key component of COMIFAC's Convergence Plan. As the value of ecosystem services is increasingly recognized and monetized, the role of PAs in providing ecosystem services has important implications for regional and national development. Assuring that these services are provided through PA systems that take forest communities into account will help to guarantee that conservation systems are also developed in a fashion that contributes to poverty reduction and local development. PAs in the region do not exist in isolation, but are part of a complex mosaic of resource and land use elements.

"Protected area" is a generic term for various kinds of officially designated conservation areas (Harmon, 2003). IUCN's definition of "Protected areas" highlights the difficulty to institute a sole "magical" management tool or strategy for PAs. Myriad approaches have been tested or used to manage PAs in Central Africa. This is demonstrated by the variety of PA categories with different management objectives and perspectives, multiple stakeholders with conflicting socio-economic and cultural dynamics, different policies and legislation as well as varied institutional arrangements for PA management and, of course, the tremendous diversity of biological assets found in PAs. This is even more complex when two or more countries are managing transboundary PAs because of different management philosophies, policies and regulatory framework



as well as national priorities. PA managers are often expected to adapt their management strategies and policies to the local setting and environment. This can be painstaking because PA managers are in a learning process. They try to rescue biodiversity, frequently fail, and start again after changing their strategies, philosophy, methods, etc., often moving from a conservationist/preservationist approach where they were protecting nature from humans, to a participatory approach in which they try to integrate humankind into nature (Mauvais, 2010). Successful managers must be sensitive to local customs and traditions (e.g., to respect sacred forests) while incorporating sound scientific principles for biodiversity conservation into their management plans (Kamanda *et al.*, 2003).

Photo 10.1: Aerial view of the Dzanga Bai in CAR

For decades, PA management approaches have focused primarily on PA territory within delineated boundaries, but management approaches are increasingly moving towards including buffer zones, the latter serving as sponge to absorb outside threats. Most threats to Central African PAs lie outside their boundaries, e.g., human pressure on PA resources as a result of road development, settlements, agricultural activities, informal resource extraction, etc. It is increasingly recognized that the socio-economic well-being of local communities must be accounted for while establishing PA management objectives.

In order to balance the conservation objectives of protected areas with the well-being of local communities and with national development priorities, CBF (Congo Basin Forest Partnership) and COMIFAC partners have recognized PAs as a core element of broader conservation (often transboundary) landscapes composed of different land use units with different management strategies.

Therefore designing a new paradigm for PA management is inevitable if PAs are to be sustained in Central Africa. Could the landscape conservation approach, now tested by the CBF,

be that paradigm? Landscapes in this instance are defined as priority areas for conservation based on their relative taxonomic importance, and the overall integrity and resilience of their ecological processes.

This chapter (i) provides an overview of threats to PAs in Central Africa, (ii) describes the role of the Congo Basin's protected area network as part of a broader COMIFAC framework for conservation that includes a series of priority conservation landscapes, and (iii) reviews current constraints to establishing effective, sustainable PA management in Central Africa. It complements the overview of national protected area systems presented in previous State of the Forest (SOF) reports (see table 3.1 «The protected areas of Central Africa» in the 2006 SOF and table 1.13 in the 2008 SOF for a review of PAs by country and different IUCN categories). It is founded on the experiences and lessons from a series of complementary programs to support PAs in priority conservation landscapes and concludes with a series of considerations to inform future support for establishing PAs that can deliver both conservation and development results for the benefit of the people of the Congo Basin.

Main threats to the values of protected area systems in the Congo Basin

Threats to PAs and PA systems, in the Congo Basin have been extensively documented in the previous editions of the SOF and in chapter 3 of this report.

For example, among threats with the widest geographical scope and highest severity, poaching for ivory and/or bushmeat trade occurs in most of the PAs of the Congo Basin. The increasing price of ivory on the black market due to the increasing global demand, often coupled with the precarious economic situation in the local surroundings of many PAs, has resulted in a sharp revival in ivory poaching in the region as a whole (see box 10.1). Ivory poaching, often referred as “*grand bracon-*

nage”, is capable of seriously depleting elephant populations in PAs and even bringing some of them to local extinction (as seen in DRC). This “*grand braconnage*” is often linked with armed rebel or military groups.

Also often linked with military groups is the establishment of illegal, small permanent or semi-permanent mines along streams within the protected areas. The environmental degradation caused by mining operations can be severe and includes the direct destruction of fragile ecosystems, such as erosion and sedimentation (siltation) in stream beds, and indirect effects such as mining related poaching.

Box 10.1: Central Africa and elephant ivory: lots of illegal trade, little law enforcement

Tom Milliken

WWF

Over the last three decades, Central Africa has lost more African elephants (*Loxodonta africana*) to illegal trade in ivory than any other sub-region. In Cameroon, Central African Republic (CAR), Chad, Congo, Democratic Republic of Congo (DRC), Equatorial Guinea and Gabon, forest and savanna areas once harbored hundreds of thousands of elephants but, at last count in 2007, the IUCN/SSC's African Elephant Database (AED) projected only 10,383 definite, 48,936 probable and 43,098 possible elephants. It was also speculated that another 34,129 animals might also be in these countries but have never been surveyed. Sadly, these numbers are certainly optimistic as the ivory hemorrhaging continues unabated in Central Africa.

The Elephant Trade Information System (ETIS), the TRAFFIC-managed monitoring system to track illegal trade in ivory under CITES, holds the world's largest collection of ivory seizure records since 1989. ETIS repeatedly implicates Central Africa as the most problematic sub-region for elephants in Africa. The last comparative analysis, undertaken in February 2010, was based upon 15,416 records from around the world, but only 96 seizures had been made by Central African countries. At the same time, these same countries were implicated in 936 other ivory seizures that were made outside of the region. In other words, ivory seizures appear to be very infrequent events in Central Africa, but substantial movements of ivory out of the sub-region regularly occur. Indeed, the ETIS seizure records that relate to Central Africa represent nearly 50 tons of ivory, with the largest illicit flows emanating from Cameroon, DRC and Gabon.

Things appear to be getting progressively worse. Over two-thirds of this ivory trade by weight (71 %) has occurred over the last ten years, which is the highest value for any of the African sub-regions. Another hugely worrying development is that 59 % of the ivory relating to Central Africa was seized in the context of large scale ivory shipments involving one ton of ivory or more at a single time. These massive illicit movements are a potent indicator of the presence of organised crime in the trade. It is believed that Asian-run, Africa-based wildlife trade crime syndicates are operative in Cameroon, DRC and Gabon.

But the region's law enforcement capabilities are grossly inadequate to address the challenge at hand. Only one in ten seizures of Central Africa's ivory trade is actually taking place within the region, a development that is the second-worst ratio of the four African sub-regions that have wild elephants. This very poor law enforcement performance is further exacerbated by serious governance short-falls. Transparency International's Corruption Perception Index collectively gives Central Africa a mean score of only 2.0 (on a scale of 1 to 10), the worst of all of the African sub-regions.



© Jean-François Lagnot

Photo 10.2: Ivory artifacts for sale at a local market in Kinshasa

In addition to large scale movements of ivory outside of the region, Central Africa also harbors a number of thriving domestic ivory markets and had over 300 active ivory carvers as recently as 2001. TRAFFIC's monitoring of these markets indicates that they are comparatively larger, more active and less regulated than anything found in the other African sub-regions. In particular, the DRC's capital city of Kinshasa is believed to offer one of the largest unregulated ivory markets in Africa. The one bright spot is that some recent evidence suggests that Cameroon, Republic of Congo and, perhaps, the CAR have all begun to take steps to suppress their domestic ivory markets.

In sum, comparatively speaking, Central Africa exhibits a set of traits most conducive to illegal trade in ivory. In 2004, the CITES Parties adopted an "action plan for the control of trade in African elephant ivory" which calls for all African elephant range States:

- to prohibit unregulated domestic sale of ivory, whether raw, semi-worked, or worked;
- to instruct all law enforcement and border control agencies to enforce such laws;
- to engage in public awareness campaigns to publicise these prohibitions.

Countries which fail to address unregulated domestic ivory markets within a reasonable period of time face possible sanctions, including the suspension of all wildlife trade options under CITES. Regrettably, some Central African countries are likely to become future targets for punitive action.

Other existing threats to PAs in the region include over-fishing, unsustainable harvest of non-timber forest products (NTFP), agricultural encroachment and illegal logging. While the sustainability of the harvest of NTFP remains difficult to assess, agricultural encroachment and illegal logging affect a few PAs and have highly localized impacts. The tracking of the latter is becoming more regular with overall monitoring of

forests and logging activities in the Congo Basin. Illegal grazing is also a major threat for PA located in the savanna fringe of the forest block. Future threats include the potential effects of climate change such as changes in rainfall distribution, habitat and species ranges and increasing dominance of invasive species. Demographic changes in countries such as DRC will also increase pressure on PA resources over time.



Photo 10.3 : Transporting artisanal products out of the forest can be challenging and arduous

Brief overview of the evolution of the Protected Area concept in the Congo Basin

PAs in Central Africa were first established in a colonial context where there was a strong interest in the extraction of large mammals, primarily in the savanna regions, and in reaction to the perceived impacts of this extraction. In the 1960s, when the countries of Central Africa were achieving their independence, over 50 hunting reserves existed on paper in the Congo Basin (most were created between 1930 and 1960). Most of these reserves were later abandoned for financial or management reasons. At the same time numerous forest reserves were created in countries (e.g., 181 in the “Belgian Congo” at the time) for the management of timber resources and to promote research in forestry. Many of these reserves were also later abandoned or converted to other land uses.

Between the 1960s and the 1980s, new national parks (NP) and other types of protected areas were established at various rates across different countries in the Congo Basin, but there was little investment in the PAs or the national institutions

responsible for their management. The majority of the little dedicated support available came from international conservation NGOs and bilateral or multilateral projects. With the creation of the CBFP in support of COMIFAC, there has been a growing and significant consideration of PA systems that has been encouraged by the regional nature of many programs to support PA management (e.g., ECOFAC, CARPE, CAWHFI, etc.). At the regional level, RAPAC was formally recognized by COMIFAC as the regional body responsible for monitoring the implementation of the PA component of the Convergence Plan (see box 7.4 in the SOF 2006). At the national level, concerted efforts have been undertaken to review, strengthen and expand PA systems in countries like Gabon (see box 6.1 in the SOF 2006), Cameroon and DRC. Significant efforts have also been put into the creation of agencies for PA system management in some countries where they did not previously exist (e.g., the National Parks Agency (ANPN) in Gabon).



Photo 10.4: Coastal forest landscape in Gabon

Box 10.2: Overview of sub-regional organizations ten years after the Yaoundé Declaration

Jean-Marie Noiraud

JMN Consultant

The institutional landscape in the Central African sub-region has changed considerably in the last ten years. New organizations have appeared on the scene, while others have disappeared or become dormant. Immediately after the signature of the Yaoundé Declaration, COMIFAC was established. In March 2005, Heads of State signed the COMIFAC Treaty, transforming the organization from the “Conference of Ministers in charge of Forests in Central Africa” to the “Central African Forests Commission”. At the ECCAS Summit in October 2007, COMIFAC became a specialized agency for dealing with forests. It now represents Central Africa in all international and continental debates related to forestry issues, including the Rio international conventions and other discussions on resource management and sustainability. COMIFAC has as its mandate to coordinate the implementation of the COMIFAC Convergence Plan, its reference tool for policy guidance and forest management activities, both at the sub-regional level and within member States. In order to successfully fulfil their mandates, other pre-existing sub-regional organizations have needed to be reformed so that they align with this new regional framework.

CEFDHAC (Conference on Central African Moist Forest Ecosystems) was the first to be reformed. Its by-laws were officially adopted by the Council of Ministers of COMIFAC in September 2008. Since then, a steering committee has been responsible for guiding the process that will make CEFDHAC a multi-actor platform for stakeholders in Central Africa to oversee agreements and dialogue relating to forests in national and sub-regional forums.

The African Timber Organization (ATO), the International Agency for the Development of Environmental Information (ADIE), and the Organization for Wildlife Conservation in Central Africa (OCFSA), are three older sub-regional organizations that have been underfunded for a significant period and, at this point, have nearly or completely ceased their activities. To be effective, they would need to be completely reformed. A process launched by COMIFAC in 2010 should, by 2011 or 2012, result in the implementation of proposals aimed at assisting these organizations undertake the roles attributed to them by the Treaty.

The Central Africa Protected Areas Network (RAPAC) is a new organization that was created from a proposal to integrate protected areas across the sub-region. RAPAC became an association and is recognized by COMIFAC as the body responsible for coordinating policies and activities related to protected areas.

The Observatory for the Forests of Central Africa (OFAC) was conceived from a European Union (EU) program, but became institutionalized to provide COMIFAC with a permanent means of undertaking monitoring and observation of forests. In 2011, a coordination unit was set up in Yaoundé in the office of the COMIFAC Executive Secretariat with a technical unit based in Kinshasa.

The Network of Forestry and Environmental Training Institutions in Central Africa (RIFFEAC) is recognized as the COMIFAC body responsible for coordinating the work, including the elaboration of training curricula, of academic and training institutions on forestry and environmental issues.

Additional networks also exist, notably REPALEAC, REJEFAC, REDIFAC, REFADD and REPAR. They are all informal dialogue mechanisms that transcend regional barriers and cross borders to develop working relationships to tackle the numerous aspects of sustainable forest management in Central Africa.

In recent years, landscape-scale conservation has become the center piece of natural resource management in the Congo Basin. The landscape approach recognizes that it is important to consider the management of resources in areas around PAs to meet the needs for development and the sustainability of protected areas in the long term.

A landscape approach highlights the PAs as core areas for biodiversity conservation within a broader complex of land uses, emphasizing their critical role for maintaining large scale functioning ecological systems. Detailed descriptions of the 12 CBFP priority landscapes can be found in previous versions of the SOF.

Interest in PA conservation has gradually increased over the years thanks in part to timely financial and technical support through CBFP efforts. Central African governments have expanded the number and/or surface area of PAs since the CBFP was launched in 2002 (table 10.1), and they have concomitantly begun processes to renovate PA management structures and increased allocation of conservation funds and human resources. For example, concurrent with the 2002 Johannesburg Summit for Sustainable Deve-

lopment, the Gabonese government announced a network of 13 National Parks and worked to create a National Parks Agency (ANPN) to manage the network. In Cameroon, thanks in part to the international interest generated for conservation by the Summit, CBFP partners including the World Wide Fund for Nature (WWF), the Cameroonian government and others, worked towards the creation of the Boumba-Bek and Nki national parks.

Table 10.1: New protected areas created since the launching of the CBFP landscapes

Landscape	Segment	Protected area included within the landscape	Date of creation (or publication)
Monte Alén-Monts de Cristal	Monts de Cristal (Equatorial Guinea)	<ul style="list-style-type: none"> • Monts de Cristal National Park • Monts de Cristal Military Reserve 	2002 Proposed
Gamba-Mayumba-Conkouati	Gamba-Mayumba (Gabon)	<ul style="list-style-type: none"> • Loango National Park • Moukalaba-Doudou National Park • Mayumba National Park 	2002 2002 2002
Lopé-Chaillu-Louesse	Lopé (Gabon)	<ul style="list-style-type: none"> • Waka National Park • Birougou National Park 	2002 2002
Dja-Odzala-Minkébé (Tridom)	Minkébé (Gabon)	<ul style="list-style-type: none"> • Mwagne National Park • Ivindo National Park • Minkébé National Park 	2002 2002 2002
	Dja (Cameroon)	<ul style="list-style-type: none"> • Boumba-Bek National Park • Nki National Park 	2005 2005
Léconi-Batéké-Léfini	Léfini (Republic of Congo)	<ul style="list-style-type: none"> • Proposed Ogooue-Leketi National Park 	Proposed
	Léconi-Batéké (Gabon)	<ul style="list-style-type: none"> • Batéké Plateau National Park 	2002
Lake Télé-Lake Tumba	Lake Tumba (DRC)	<ul style="list-style-type: none"> • Tumba-Lediima Reserve • Ngiri Biosphere Reserve 	2006 2011
Maringa-Lopori-Wamba (MLW)	Maringa-Lopori-Wamba (DRC)	<ul style="list-style-type: none"> • Lomako-Yokokala PA • Lyondji Community Bonobo Reserve • Congo-Lopori PA 	2006 Proposed Proposed
Maiko-Tayna-Kahuzi-Biega (MTKB)	Maiko-Tayna-Kahuzi-Biega (DRC)	<ul style="list-style-type: none"> • Tayna Nature Reserve • Kisimba-Ikobo Nature Reserve 	2002 Proposed

New paradigm

The backbone of the landscape conservation approach is that PAs (with or without buffer zones) cannot be managed as isolated entities. The fundamental truth is that PAs occur within the broader context of larger functioning ecological systems. Thus management approaches can be designed around specific land or resource units, herein termed “macro-zones”, as a cohesive part of the overall ecosystem (see chapter 11). In accordance with principles of integrated conservation initiatives and broad-scale land management, each landscape can be subdivided into different categories of management areas or macro-zones, including: (i) Protected Areas (PA), which are core areas for biodiversity conservation, (ii) Community Based Natural Resource Management (CBNRM) zones, which are core areas for linking conservation with sustainable livelihoods options, and (iii) Extractive Resource Zones (ERZ), which are core areas for sustainable economic development.

Planning is the process in which stakeholders (e.g., community members, scientists, government representatives, private businesses) come together to debate and discuss how to manage lands for the benefit of current and future generations and to ensure ecological sustainability of lands and resources. This approach is supported by technical specialists from United States Forest Service (USFS) and CBNRM partners who have developed a series of four guides to work through the planning process. Guides have been prepared for landscape level planning as a whole, and for each of the three categories of macro-zones listed above (PA, CBNRM and ERZ)⁵⁹.

The landscape guide provides practical guidance on developing “integrated landscape land use plans” for the entire landscape. The landscape guide further explains the purpose of planning and outlines key concepts central to the landscape planning process. It describes the process for writing an integrated landscape land use plan and provides a framework of landscape land use plan components. It suggests section headings to use, and provides explanations regarding concepts to consider and items to include when developing each section of a landscape land use plan.

The PAs and CBNRMs guides describe the same issues with the similar emphasis, on sections and terms as the landscape guide, but at the scale of PAs and CBNRM zones respectively.

The ERZ guide provides practical guidance for the field implementing partners to engage in developing and implementing land use management plans for extractive resource zones (ERZ) in coherence with landscape plan objectives. ERZs in Central Africa include forest concessions, large scale private plantations, mining, oil and gas, and safari hunting zones. The ERZ guide highlights how field implementing partners should strive toward sustainable and socially and ecologically responsible operations.

The ERZ guide describes how resources can be extracted on a sustainable basis that does not compromise the long-term productivity or ecological values of the land. It takes into consideration the title holders’ aspirations and other stakeholders’ concerns, as well as the pertinent legal and regulatory framework, for a given area over a stated period of time. ERZ management plans describe desired conditions for land and resources, their function and use, and their sustainability for future generations.

⁵⁹<http://carpe.umd.edu/carpedocs/index.php>

Photo 10.5: Local transport on the vast river network of the DRC



© FRM

Protected area management in the new paradigm and within landscapes

PA management planning is a participatory process which first identifies and then elaborates a formal consultation process amongst all actors and stakeholders, including indigenous and local populations, decentralized local and central government officials, international NGOs, etc. This initial identification and consultation process is vital because it promotes buy-ins from all stakeholders, promotes synergy and reduces conflicts. Planning helps to blend management and governance strategies with scientific understanding of natural habitats and socio-cultural systems, patterns, mores and values. This process fosters decision-making that is understood, accepted, feasible and more easily implemented by all actors.

PAs are managed by a management plan, a tool which describes the various activities that are needed to ensure that PAs achieve the purpose and vision for which they were created. The PA planning process seeks to highlight how stakeholders have: (i) assessed and analyzed activities, resources, uses and trends in the PA; (ii) elaborated desired conditions and objectives for the PA; (iii) consulted, collaborated and integrated other stakeholders in plan development; and (iv) focused management activities to achieve desired conditions and priority objectives with the appropriate stakeholders (USFS, 2010).



Photo 10.6: Logs of niové (Staudtia kamerunensis), a lesser known species with interesting prospects in terms of commercial development

Management objectives of protected areas in the landscape concept

Management objectives are specific to a given zone and have to address the whole set of threats

that the area is facing and will be facing in the future.

Biodiversity conservation

PAs are the cornerstone of biodiversity conservation in the Central African landscapes. These PAs harbor some of the world's richest biodiversity which, if not conserved now, may well become extinct in the near future. Some of these PAs are globally unique, harboring endemic species like the bonobo and the okapi in DRC.

In order to successfully conserve biodiversity in the Congo Basin, PAs must succeed at maintaining natural processes and viable populations, while mitigating or excluding threats.



Photo 10.7: Forest elephant (Loxodonta cyclotis)

Ecotourism development and recreation

Ecotourism provides an added economic opportunity for some PAs in the Congo Basin. Although the natural wealth of the Congo Basin forested region has not been exploited for tourism systematically due to legitimate logistical and market constraints, few select PAs (such as Volcanoes, Virunga and Dzanga-Ndoki national parks

respectively in Rwanda, DRC and Central African Republic (CAR)) regularly receive international tourists. The governments and local populations living adjacent to these parks are benefiting from this source of revenue, which provides a financial incentive for local communities to participate in the sustainable management of PAs.

Research (applied and basic such as inventory and monitoring)

An important achievement is the wealth of research results that are available in the COMIFAC library. The conservation of biodiversity in the various protected areas has facilitated research work by a multitude of stakeholders (e.g., doctoral research studies, government research to facilitate decision-making). These research activities not only contribute to scientific knowledge, but also make available critical knowledge needed to conserve these natural resources for our benefit and that of future generations.

Over the last ten years forest inventories and biodiversity surveying techniques have become more standardized, improving the state of knowledge for many timber species and some key mammal species (see specifically “State of biodiversity in the Congo Basin” in chapter 1 and part 3 of the 2008 SOF). Despite this growing understanding of the status of certain species, more information is necessary to understand the management of many lesser known species and assure the current PA systems are representative of the region’s biodiversity.



Photo 10.8: Surveys play an important role in monitoring the status of species

Climate change mitigation

Encompassing vast areas of tropical moist forest, PAs in the Congo Basin also have an important role in terms of ecosystem services. At the same time, these forests have a high potential for carbon storage, and therefore, they can effectively contribute to mitigating the adverse effects

of climate change. Integrating PAs into larger scale landscape planning provides opportunities to enhance the resilience of ecosystems to climate change, offering a mechanism to help safeguard provisioning and regulating ecosystem services.

Other ecosystem services

According to the Millennium Ecosystem Assessment (2005), the services provided by ecosystems include: (i) provisioning services (food, fresh water, timber, fiber, genetic resources and bio-chemicals); (ii) regulatory services (climate, water and disease regulation, and water purification); (iii) cultural services (spiritual, aesthetic, recreation and ecotourism, education); and

(iv) supporting services (primary production, bio-geophysical systems of soil formation and nutrient cycling). Many of these services are indirectly and/or directly of critical importance to the well-being of people in the Congo Basin: PAs represent an important land use option for preserving these services.

Performance, outcome and results of protected area management in CBFP landscapes

This section seeks to outline some of the major results that CBFP PA managers have achieved since its launching in 2002. As will be seen, some

of the achievements are intangible while others are material.

Generation of resource-based knowledge

The last two editions of the SOF reports of 2006 and 2008 describe one of the initial priorities in the management of CBFP PAs: the generation of resource-based knowledge of key biological diversity assets in the Congo Basin to facilitate conservation. This explains why, unlike other macro-zones, substantial financial and technical resources were invested in the management of CBFP PAs. Strong working relationships between government agencies and CBFP partners have generated innovative ideas and concrete results concerning the development and management of PAs in the respective countries. Data that were jointly generated by PA managers and government officials facilitated decision making, notably in both the creation of new PAs and/or the management of existing ones.

An analysis of recent ecological surveys from the Congo Basin reported in the 2008 SOF, demonstrated the importance of PAs for the conservation of some key mammal species. For example, the analysis reported that sites where elephant signs were abundant are located in protected areas. The same analysis concluded that overall the status of some species is cause for concern, and in areas such as the DRC where the syndrome of the “empty forest” has become widespread, a broader and more concerted effort is needed to reverse the biodiversity loss incurred. These results suggest that formal management systems, such as those established through PAs, have a critical role to play in conserving key species. There is an immediate need to establish effective PA management to have any chance of maintaining the Congo Basin’s biodiversity. New biologically rich areas have been found⁶⁰, gazetted and are now in the process of being vetted as PAs.

Elaboration of national policies and laws on protected area management

CARPE (Central Africa Regional Program for the Environment) partners, working alongside other CBFP members, notably within the framework of Country Teams, are using concrete field results to develop and validate appropriate policies and laws to facilitate work on the ground. For example, the Gabonese National Parks Agency (ANPN), which is responsible for managing 13 national parks, was created shortly after the inception of CBFP by the government of Gabon as its contribution to the partnership.

While the promulgation of several national parks laws was a hard earned success by CBFP members, establishment of functioning national parks authority has been an additional challenge.

In DRC, Country Team members are currently discussing ways and means to improve their PA management structures. In Republic of Congo a draft decree to create a National Wildlife and PA Agency is currently being discussed by Country Team members. In Equatorial Guinea, a presidential decree has been signed that prohibits the hunting of large primates in the country which has demonstrably reduced poaching in PAs. Rwanda and Cameroon are currently discussing revisions to their forestry code and CARPE Country Team members are deeply involved in all the discussions. A National Poaching Control Strategy for Cameroon was adopted in 2008 through the support of CBFP partners like WWF, IUCN, etc.



Photo 10.9: African forests harbor tree specimens of truly spectacular dimensions

⁶⁰For example, a new gorilla population discovery in the Sangha Tri-National (TNS) and the Lake Télé landscapes in Republic of Congo almost doubled the western lowland gorilla population estimates from 175,000 to 225,000.

Regionally, CBFP PA managers facilitated the signing of the Lake Télé-Lake Tumba transboundary collaboration Agreement by Ministers in charge of forestry and the environment for the Republic of Congo and DRC in 2010. The Sangha Tri-National Foundation (FTNS), created with assistance from CBFP PA managers,

has demonstrated positive impacts in Cameroon, Congo and CAR (box 10.3). The rationale for establishing transboundary landscapes is to address the complex nature of the threats from illegal logging and poaching in PAs and to create a single voice in international discussions.

Box 10.3: The Sangha Tri-National Foundation (FTNS): a mechanism for sustainable financing and transboundary agreements

Brigitte Carr-Dirick, Thimotée Fomete

FTNS

In December 2000, the governments of Cameroon, Central African Republic (CAR) and the Republic of Congo took a decisive step in fulfilling the commitment they made within the framework of the Yaoundé Declaration by signing a Cooperation Agreement to set up and manage the transboundary forest complex called “Sangha Tri-National” (TNS). The TNS covers a total surface area of about 44,000 km² and comprises three neighboring national parks, Lobéké (Cameroon), Dzanga-Ndoki (CAR) and Nouabale-Ndoki (Republic of Congo), as well as their buffer zones. The TNS is not only host to forests that are extremely rich in biodiversity; it also provides a wide range of environmental services for local and indigenous communities as well as for the global community through carbon sequestration. The three countries are implementing a management system in partnership and significant progress has been made, in particular, through the establishment of a tri-national anti-poaching brigade, an agreement on the free movement of staff and the adoption of a land use plan. They have also jointly proposed that the TNS become a World Heritage Site.

The “Sangha Tri-National Foundation” (FTNS) was established in 2007 as a private charitable entity under English law, with headquarters in Cameroon, in order to provide for the long-term financing for TNS activities. The FTNS has a legal and governance structure capable of mobilizing investments from all sectors. It is managed by a Board of Directors comprising eleven members that include representatives from the three governments, the KfW, AFD, WCS, WWF, the *Regenwald Stiftung* as well as three representatives from civil society organizations in the countries concerned. The first two capital injections – € 5 million from KfW and € 3 million from AFD – have been invested on international money markets by an investment manager of international stature. The investment is geared towards generating a flow of long-term stable revenue that will finance targeted activities. Income from initial capital will complete that provided by *Regenwald Stiftung*, which has already mobilized nearly € 4 million through the “*Krombacher Regenwald Kampagne*” publicity campaigns organized jointly with WWF in Germany. Other capital contributions are being prepared in order to reach the objective of € 35 million. While waiting for a return on investments, the FTNS operates through grants it receives from KfW, the European Union via UNESCO and the Congo Basin Forest Fund (CBFF). Since 2009, FTNS has been able to use these grants to finance field work. Procedures used ensure a transparent and equitable allocation of revenues.

The FTNS is the result of a true public-private partnership and a forerunner as a tri-national environmental fiduciary fund. It acts as a model for similar initiatives and seeks to establish innovative and sustainable financing mechanisms in support of the COMIFAC Convergence Plan.

Involvement of local and indigenous populations

One of the pillars of the CBFP Protected Area management strategy is participatory management which acknowledges the traditional rights of indigenous and local populations around and within the PAs. Managers have learned from experience that PA management is “a science of compromise... because no one group has enough power to impose rules that other stakeholders do not understand or share” (Usongo & Nzooch Dongmo, 2010). Incorporating communities in the planning and operations of PAs and their peripheral areas, and assuring sharing mechanisms for any potential tangible benefits, provides an important opportunity to develop community endorsement and build local recognition for the role of PAs. This is also an opportunity to provide a mechanism for communities to gain official recognition of their rights in a region where tenure and resource rights remain poorly defined. But before even advancing to this stage, managers were assured that the entire conception and implementation of the PA land use planning was a win-win process wherein local peoples’ rights and responsibilities would be fully respected. This was testified as a lesson learned by government officials and some partners during the early phase of CBFP PA management.

For example, empirical evidence from Lobéké National Park in Cameroon has shown how powerful a “seemingly weak” indigenous group could become when they felt that their rights and obligations had been tampered with by some unruly actors. The ministry officials finally recognized their errors and bowed down to persistent pressure from local and indigenous populations, especially on aspects related to delimitation of national parks and harvesting rights. Government forest departments are now abandoning top-down, “command and control” traditions and evolving towards a more adaptive, pluralistic vision of their own role (Sayer & Maginnis, 2005). Stakeholders also found similar problems in the management of the Okapi Faunal Reserve in the Ituri-Epulu-Aru Landscape of DRC when they discovered that “indigenous groups perceived forest in PAs to be an abundant resource for them, and one of the goals of the zoning system was to empower these groups to understand the value and limited nature of their land and resources, and to manage them accordingly” (Brown, 2010). Multi-stakeholders dialogue has been very important in obtaining support from local and indigenous populations who are currently contributing, amidst some minor problems, to the management of the Reserve.



Photo 10.10: Consultation with local communities is an essential and much appreciated part of any participatory process

Small grants and civil society organization in protected areas

One of the strategies to fully engage civil society organization to sustainably manage CBFP PAs was through the Small Grants Program. The Small Grants Program has contributed to strengthening the capacity of civil society organizations to be fully engaged in conservation activities. This strategy has fostered strong partnerships between landscape management consortia, PA managers, local NGOs and government officials in the field. With this seed money, civil society organiza-

tions became assets to conservation efforts in PAs because their actions filled some gaps in the PA management plan. For instance, REFADD⁶¹ used small grant money to translate the Forestry Code into a local language (Lingala) and to disseminate it around the protected areas in the Equateur province (DRC). This action yielded unprecedented results whereby local communities reported to the police eight instances of poachers trading endangered species' skins.

Publication of lessons learned in protected areas

The CARPE Lessons Learned publication⁶² provided a feedback mechanism from a variety of stakeholders, and has helped participants to benefit from one another's experiences and thereby improve their own interventions. This publication contains 27 case studies of applied conservation as well as 7 overview articles synthesizing the results of case studies, covering different thematic areas. The generation of the Lessons Learned forced CBFP partners themselves to engage in an analytical reflection of their own activities

and thus encouraged a process of learning and adaptation during the implementation of future PA program (Yanggen *et al.*, 2010). Key findings in this publication concern thematic areas such as (i) land use planning at the landscape, PA, concession and community scales, (ii) the role of alternative livelihoods, (iii) the promotion of national policies, (iv) the use of small grants to strengthen natural resource governance, and (v) the monitoring of natural resources.

⁶¹REFADD: African Women's Network for Sustainable Development.

⁶²<http://www.iucn.org/dbtw-wpd/edocs/2010-037.pdf>

Photo 10.11: The small city of Bayanga (in the Sangha Tri-National Landscape - TNS) is an entry point for elephant and great ape wildlife tourism



© Frédéric Sepulchre

Coordination of efforts and funds

Some observers are of the opinion that before the CBFP was launched in 2002, conservation funds were not properly used in many of these PAs because management strategies were not well tailored toward robust objectives, efforts were not well coordinated and there were serious issues of environmental political jingoism among partners. With the launch and implementation of the CBFP, donor governments like France, Germany, Canada, the Congo Basin countries themselves, NGOs and international organizations like IUCN, WWF, WRI, WCS, CI, CIFOR and all CBFP members agreed to form a Type II⁶³ non-binding partnership to facilitate coordination, synergy, joint planning and monitoring of activities in CBFP PAs. This Type II process not only facilitated the identification and recognition of these PAs by all CBFP parties, but also yielded unprecedented results because confidence was restored as coordination of partners' activities and funds became a priority.

A recent analysis provides rough estimates on available funding for PAs in the Congo Basin (GEF, 2010). The PA-related expenditure in 6 Central Africa countries (Cameroon, CAR, Equatorial Guinea, Gabon, Congo, DRC) for the year 2009 surpassed \$ 50 million and represents a significant increase compared with previous figures assessed at the launching of the CBFP. In the early 2000s, between \$ 10 and 20 million was estimated to be allocated to PA management. However, during the same period, the area under protection increased significantly with the expansion of PA systems and current estimates remain significantly below the annual recurring costs for PA system management. The study stressed significant variations among Congo Basin countries based on estimates of actual spending per hectare.

Capacity building of protected area managers and actors

Capacity building of PA managers and stakeholders in CBFP landscapes has been a top priority of the CBFP and this is increasingly having a positive impact on sustainable PA management. The range of themes covered by trainings provided to PA staff has been continuously expanded since the launching of the CBFP. Initially focusing on specific core PA activities (e.g., wildlife survey and law-enforcement techniques), training sessions were later developed to build staff capacities on broader PA management topics (e.g., management planning, monitoring of management effectiveness) and other related aspects (e.g., lea-

dership). The audience targeted by trainings has been extended beyond the strict PA management team to other stakeholders as well. Government officials, community and civil society organization members have been increasingly included in training initiatives. For example, government officials have been trained on how to develop and use interactive forest atlases to monitor illegal forest and mining activities in PAs and forest concessions. This has to some extent dissuaded concessionaires (logging or mining) from encroaching into PAs.

⁶³The principles of this partnership are: (i) the complementarity with intergovernmental agreements (Type I) (mechanism of delivery of concrete and precise results), (ii) the voluntary adoption (mutual respect and shared responsibility), (iii) participatory approach (all participants are considered equal), (iv) the provision of added value, (v) the integration of partners efforts (economic, environmental and social), (vi) the international dimension initiatives (global impacts) and (vii) the need to report the results (transparency, shared accountability).

Box 10.4: Institutional reform: the case of ICCN

Marc Languy

AGRECO G.E.I.E.

At the end of the war in the DRC, protected areas were in an alarming state in terms of conservation but they still showed potential for recovery. An institutional review carried out in 2006 showed that, in addition to a need for increased support for the sites, there was an urgent need to reform the organization in charge of protected area management in the DRC, the Congolese Institute for Conservation of Nature (ICCN).

This reform started in mid-2009 and, although it has not yet finished, it has already highlighted two essential elements required for successful implementation: (i) the need for a favorable political and legal context, and (ii) that the reform should focus on ICCN's greatest asset, its human capital.

The political context relates to the political will to reform all State institutions. This has resulted in ICCN and its supervisory Ministry becoming pilot institutions at the national level and being given a new statutory framework. ICCN therefore moved from being an enterprise to becoming a public body which gave it greater management autonomy. Consequently, in April 2010, ICCN was given its own unique statutes and, at the end of 2010, it started working on revising the statutes for its staff.

ICCN's human capital, comprising over 2,000 employees, is by far its greatest asset. At the same time, it is its greatest management challenge. Reform has focused essentially on gaining a better understanding of the workforce, with a physical and biometric census being undertaken for the entire country. At the same time, by transferring staff between sites, an improved overall distribution of staff was achieved. About 500 additional staff joined staff already working on conservation *in situ*. The new staff came from the former Congolese Institute of Zoological and Botanical Gardens which had been dissolved and merged with ICCN. This merger will provide for economies of scale and exchanges of expertise in complementary areas that are focused on biodiversity conservation in the DRC.

The increased capacity of ICCN also highlights two important areas of reform: (i) staff rejuvenation, through early retirement programs and the recruitment of young staff, and (ii) developing training programs. This latter can only be developed at the end of the reform process once post requirements have been studied and staff evaluations have been carried out.

A huge task awaits ICCN in 2012 to ensure that the benefits achieved by its reform can be assured over the long term. This task is the development of a modern remuneration policy which will keep the best staff on board. This policy will be based on a realistic but extensive study of ICCN's "renovated" resources. Part of these resources will come from an increased State contribution. The revival of tourism, which has significantly increased since June 2009, has provided ICCN with additional resources so that it also will be able to increase its contribution. The support of international partners will however be necessary to guarantee that indispensable additional resources are provided. The establishment of new structures and principles of transparency allowing accounts to be audited in accordance with international criteria will make it possible for contributions to be provided through direct subsidies and also by means of a fiduciary fund for protected areas.

Barriers to the effective management of protected areas systems in the Congo Basin

Financial capacity

Despite an increase in resources dedicated to PAs, inadequate funding remains a major constraint to establishing effective management. National budget allocations and enhanced funding mechanisms are insufficient if PA financial sustainability is to be achieved. There is a need to find more sustainable solutions to mobilize and manage funds. While international cooperation remains critical for PA management in the Congo

Basin, other categories of self-generated revenues exist to various degrees, including: tourism and hunting charges, environmental funds (e.g., trust funds - see box 10.3 on FTNS), debt-for-nature swaps (e.g., C2D⁶⁴ in Cameroon), corporate sponsorship, biodiversity offsets, etc. Payment for environmental services, including REDD and watershed payments, have a potential to play a more significant role in the future.

Management planning

A 2009 assessment of the status of management planning of 152 PAs in the Congo Basin (DRC, Congo, CAR, Equatorial Guinea, Gabon, Cameroon, São Tomé & Príncipe, Chad), found that 13 PAs (about 8 %) possessed a validated management plan while 23 others (about 15 %) were in the process of elaborating management plans (RAPAC, 2009). While this is a small percentage of the total PAs, this represents a significant effort knowing that management planning has not historically been considered a top priority relative to the establishment of new PAs and addressing immediate threats.

There has also been a growing recognition of the context of PAs within a broader landscape and mosaic of land use types. In accordance with this principle, the planning process has been expanded to better engage diverse stakeholders (i.e., local communities, other government bodies, private sector) and to take into consideration social aspects of resource management. At the same time, management plans and the planning process have become more complex.

PA management planning in the region has progressively and more systematically included a business plan section. This increases the accountability and transparency of the management activities.



Photo 10.12: The region is characterized by the close interaction of forest and water systems

⁶⁴Debt reduction and Development Contract.

While there is a growing awareness of the value and importance of monitoring management effectiveness, there is a need to more systematically implement such processes. This lack of systematic implementation hinders the establishment of a more pro-active and responsive management style, which is critical to adjust and respond to threats and conditions as is required in the context of the Congo Basin.

Also, there is a risk of considering the management plan as a goal in itself (e.g., for financial attraction) and not implementing the activities and strategies outlined in the plan, nor monitoring the effect of these activities.

Management considerations

Because of the immediate and high level threats to the resources in PAs, effective law-enforcement in and around PAs remains, with few exceptions, a prerequisite for PAs to fulfill their role as core biodiversity conservation areas. Planning, implementation and monitoring of law-enforcement strategies have been generally improved through the use of more robust standards and increasing effort. However, many PAs are still facing major difficulties in ensuring effective law-enforcement, resulting in a serious incapacity to slow down the rapid decline in populations of some wildlife species. This has occurred despite increasing investment and effort in conservation over the last decade and reiterates the needs for more monitoring of management effectiveness and a system for adaptive management.

While recognizing the need to address immediate threats to the protected areas, working at a broader scale has emphasized the tenuous economic situation for communities in and around PAs.

The real poverty issues that concern most communities in the Congo Basin cannot be ignored and establishing sustainable PA systems will also depend on the ability of governments and development organizations to address poverty and development concerns. Partners engaged in PA management do not have the capacity or skill to significantly address these issues.

Competing land pressures

The ecological integrity of PAs is under increasing threat from the expansion of agriculture (to meet human food requirements and in response to demand for agrofuels), mining and logging activities, infrastructure projects, and other development. As land is divided, species' movements, natural cycles, and ecological functions can be disturbed. Participatory and collaborative planning and decision making will be important

for different stakeholders within and around PAs and their connective corridors to try and maintain the long term ecological integrity of PAs. In many areas of the Congo Basin, sectors of the national economy are planned and managed by separate agencies. The limited focus of agencies and the lack of clear frameworks for collaboration can make it challenging to incorporate PAs into integrated conservation or development plans.



Photo 10.13: Slash and burn agricultural practices result in the conversion of forests and changes land cover

Opportunities and considerations for effective protected area management

Mitigating threats

- Support and political will to address poaching and wildlife trafficking in and outside of the Congo Basin will need to be strengthened if there is any hope of conserving certain species. Making the link between anti-poaching and trafficking is an important means of tracking management effectiveness. Building capacity and support for judicial follow is critical to assure that deterrence mechanisms can be established.
- PA conservation efforts will never succeed if all concerned government officials are not fully associated with the process. This is normal and expected in most settings, but institutional weakness of Central African administrations could result in the *de facto* management responsibilities falling to NGOs.
- Building off of transboundary initiatives supported through the CBF, national and regional bodies, regional planning and the harmonization of conservation objectives across boundaries will continue to be important to strengthen individual PA systems.

Box 10.5: The management of protected areas in a post-conflict environment

Dr Jean-Pierre d'Huart

Conservation Consultancy Services SPRL

The impact of conflict on protected areas (PAs) does not disappear when that conflict officially ends. Experience shows that, while a State expects its services to make a special effort in the reconstruction process so that the country can function again normally, a number of obstacles can impede this effort. In most cases, the administration in charge of PAs is among those given lowest priority from a national perspective. The State tends to allocate its limited financial resources to more visible social and economic sectors such as infrastructure, health, education, water/electricity, housing and/or employment. The PA administration often finds itself unable to get its protected areas network up and running quickly. Without its own financial resources, it becomes dependent upon donor support and the assistance of international NGOs. Furthermore, as the instability caused by the conflict has affected its structure and functioning, it may have to deal with complex problems affecting its staff. The administration's management capacity is often ill-equipped to cope with the chaotic situation it faces, and therefore, some donor support is allocated specifically to restructuring and institutional reform.

In the field, staff in a post-conflict environment often rely more on the assistance of NGOs (themselves largely dependent upon donor support) than on that of the central administration and there may be a consideration to outsource the management of some PAs to the private sector. In some cases, relations between the administration and its partners are affected, causing dissension that can only be alleviated through open and professional discussions with staff. Relations with other administrations and the political sphere rarely fare any better. Encouraged by the potential contribution they can make to the country's economic recovery, some Ministries disregard the law and sign important contracts – for roads, petrol or mines – that undermine the integrity of PAs. Apart from the sometimes disastrous environmental impact of these contracts, the conflict of interest they represent can constitute an enormous challenge in terms of the impact on the relative importance a government attaches to its PAs.

In any post-conflict situation, on-site managers are faced with a long list of challenges. The administration has to re-establish security in the country while armed groups are still operating in the interior. As it cannot expose its eco-guards to this situation, it has to work with the armed forces which are often responsible for looting resources. Parks have to deal with the delicate and costly evacuation of the illegal occupants who moved in during the conflict. The administration's relative weakness means it has difficulty re-establishing control: rather than dealing with their principal objectives, conservationists need to devote most of their attention to the problems caused by soldiers, poachers, rebel groups, neighboring communities and local politicians. The large scale projects supporting post-conflict efforts allow basic managerial functions to progressively work again but require extremely skilled managers. The human implications of a post-conflict situation are much more difficult for managers to handle than the reconstruction and surveillance of the park, the reorganization of environmental work and tourism, or the development of an appropriate form of participatory management.



© Carlos de Wasséige

Recognizing the value of protected areas in an increasingly competitive land use context

- The natural goods and services maintained by PAs are often provided in the region at no or very low costs. There has been very little progress in introducing the principle of payment for environmental or ecological services. As competition for land increases with development opportunities, it will be important to demonstrate and consider the full economic value of PAs. Building off of the lessons learned through the landscape approach, implementing participatory planning between sectors and recognizing the direct and indirect benefits of PAs will help to address issues associated with increasing competition for land and resources.
- Assuring that Environmental Impact Assessments correctly assess the potential damage and imposed on PAs, and identify mitigation measures that achieve the necessary environmental and social protections will be increasingly important as development of extractive industries and infrastructure grows.
- To establish sustainable funding mechanisms for PAs, support is needed to build management capacity to generate revenue, manage funds in accordance with management and business plans and to promote an enabling institutional and policy environment. At the international level, PAs may qualify for REDD+ financial incentives.

Photo 10.14: A majestic tree appears in the morning mist

Co-management of protected areas

- Across the Congo Basin, there are individual examples of co-management models with communities at various stages of development for PAs and buffer zones. There is a need to review these examples to further identify effective, sustainable and replicable models of community based PA governance and management models.
- In many countries, the legal frameworks (i.e., land tenure and resource rights) for co-management are not yet fully developed to support the establishment of formal co-management schemes. Moreover, weak systemic and institutional capacities currently prevent national organizations from efficiently integrating local communities into PA management. The establishment of co-management systems will require an increase in investment to support these processes and capacity building, for both national management agencies and local communities.
- The viability of community based management or co-management systems will likely be dependent on economic considerations. Strategies to promote sustainable financing mechanisms for local committees are needed and pilot programs that promote benefit sharing and compensation mechanisms should be promoted.

Capacity building

It is very important to remember that a key underlying requisite for successful PA management in the Congo Basin is capacity building of all relevant stakeholders. Current conservation

efforts will certainly be unsustainable if donors do not seek to “normalize” the processes by building the capacities of Central African conservation institutions and actors (see box 10.6).

Policies and laws

It is vital to make sure that relevant policies, laws and regulatory frameworks are regularly updated to meet the challenges of changing and dynamic field conditions. Threats, and therefore

conservation dynamics, often change and conservationists must be alert to these dynamics and adapt as quickly as possible.

Box 10.6: ERAIFT's contribution to sustainable development in tropical Africa: capacity building

Samy Mankoto, Baudouin Michel and Noëline Raondry

UNESCO / ERAIFT

On 10 April 1999, the Regional Post-graduate Training School on Integrated Management of Tropical Forests and Lands (ERAIFT) opened its doors on the campus of the University of Kinshasa (UNIKIN). Under the auspices of UNESCO's Man and the Biosphere Programme (MAB), it is supported by several associated African countries and numerous donors (i.e., UNDP, Belgium, European Union, World Bank Trust Fund/EU, and more recently, Wallonie-Bruxelles International and ECCAS-ADF through PACEBCo's regional program).

ERAIFT is developing an original approach in Sub-Saharan Africa, using a systemic approach as a conceptual basis and as a mode of pedagogical training. The school provides post-graduate training in the third cycle (DESS or Master II) for students who have finished 4 to 5 years of university studies and who have at least 3 years of professional experience. The students are from Central African countries (i.e., Angola, Burundi, Cameroon, Congo, Gabon, CAR, DRC, Rwanda, Chad), from West Africa (i.e., Burkina Faso, Benin, Côte d'Ivoire, Guinea, Niger, Senegal, Togo) and from the Indian Ocean region (Madagascar).

In December 2001, at its 20th symposium, held in Abidjan (Côte d'Ivoire), the African and Malagasy Council for Higher Education (CAMES) recognized the ERAIFT DESS diploma, making ERAIFT a very interesting prospect for young African researchers. From 2012, instruction which is currently given only in French will be bi-lingual (i.e., French and English).

ERAIFT has signed agreements with doctoral schools or equivalent bodies from partner institutions (i.e., UNIKIN, UNIKIS, Gembloux Agro-Biotech, Laval University in Quebec, Canada) and provides *in situ* facilities for researchers from the aforementioned countries to allow them to prepare their theses.

ERAIFT also gives further education to ministries and national administrations staff in charge of the environment, nature conservation, land use planning and rural development in tropical African countries and provides advisory services in its areas of competence and research.

In the next three years, ERAIFT is likely to become a category 1 Institute of UNESCO. The systemic approach ERAIFT uses in its teaching and research gives it its defining and original character. As former pupils say, it is "a school unlike any other". An impact study, carried out in 2007 looking at the last four classes, showed the relevance of the teaching provided, the specific pedagogical approach developed by the school, as well as the significant contribution ERAIFT makes to building indispensable capacity, especially in the Congo Basin. Undertaken as an endeavor with a process of participatory evaluation, the lessons learned from the experience of ERAIFT will serve to further improve the school's effectiveness, consolidate its institutional sustainability and allow it to be replicated in other African countries.

Launched under the MAB Programme, the development of a South-South partnership with university and research institutes in Brazil (basin of Amazonia) and in Indonesia (basin of south-east Asia), and the establishment of a tripartite North-South-South cooperation network, are among ERAIFT's current priorities. These priorities are fully compatible with issues that are high on the international community's agenda, in particular those relating to climate change, REDD+, and the "Declaration of the Heads of State and Governments on the Three Tropical Forest Basins in the World" (Brazzaville, 3 June 2011).

Another priority for the school is the establishment of a distance learning method which is likely to significantly increase ERAIFT's impact in providing capacity building for the leaders and decision-makers of the Congo Basin member States and Sub-Saharan Africa.

Conclusion

A new paradigm recognizes that protected areas do not exist in isolation but are core components of landscape scale ecosystems. Therefore, successful PA management should fit into a landscape scale management strategy which addresses surrounding land use practices and provides for the socio-economic well-being of local communities. Although PA management in CBFP landscapes has been very challenging, it has yielded some concrete results over the years, in part because of a people-oriented approach to conservation.

Empirical evidence is now demonstrating the performance of PAs within landscapes in terms of biodiversity protection.

A type II partnership approach to PA management in landscapes through the CBFP has proven effective in orienting funding towards a common goal. Many stakeholders are now collaborating because the strategy has fostered an intrinsic link

between conservation and sustainable livelihoods. Results show that conservation is not just biophysical but also socio-cultural; that PA conservation benefits and values are not just economic but also intangible.

Discussions around the world are increasingly tilting towards climate change, notably REDD and payment for environmental services. PAs in CBFP landscapes are invaluable assets for carbon storage and capture. It will therefore be very advantageous for State parties in the Congo Basin to include the natural tropical forests contained in protected areas as part of REDD related negotiations. However, in order to benefit from these assets, there is urgent need to continue with the collaborative management of these PAs by all stakeholders, especially among local populations, governments and PA managers. This is just part of the future priorities for PA managers in the CBFP landscapes.



Photo 10.15: Water and forest dynamics are intimately linked to each other throughout Central African landscapes