► The West African Protected Areas Newsletter

"La lettre des aires protégées en Afrique de l'Ouest"

N°48
December 2011

Protected Areas and Species Diversity in Eastern and Southern Africa: a quick review of the context…

IUCN-ESARO (IUCN Eastern and Southern Africa Regional Office) has compiled a situation analysis of the region with regard to protected areas and species conservation. This analysis has been prepared by Leo Niskanen, Technical Coordinator of the Program on Conservation Areas and Species Diversity (CASD). Hereafter is presented a short abstract of this work…

The eastern and southern Africa (ESA) region is extremely rich in biodiversity. The region has high numbers of endemic species and the largest remaining populations of iconic wildlife left on the continent. This biodiversity provides a wide range of services that are of vital importance to the livelihoods and economies of the region. However, this natural wealth is under pressure from a number of threats, including habitat loss and degradation, overexploitation of natural resources, pollution, climate change and invasive alien species. These threats are driven by high levels of poverty and population growth, growing global demands for natural resources, and weak capacity and inadequate resources for biodiversity conservation.

Many countries in the ESA region have designated a significant portion of their terrestrial areas for biodiversity conservation. The region hosts many large world-renowned national parks and reserves, such as the Serengeti, Kruger, Etosha and the Maasai Mara. There are also many different types of conservation areas managed by local communities for various purposes, which continue to protect important biodiversity. Many of these areas have to face severe management challenges and pressures (not presented in this APAO newsletter but that are included in the situation analysis).

1. Overview of biodiversity in eastern and southern Africa

The ESA region encompasses a wide range of different terrestrial biomes ranging from deserts to moist tropical broadleaf forests. The marine biomes are equally diverse with overlapping centers of endemism of fish, corals, snails and lobsters. The region's uniqueness is enhanced by its large open landscapes and emblematic wildlife species.

1.1. Main ecosystems and habitats

Forest ecosystems

The forest biome in the ESA region is highly diverse ranging from the high rainfall tropical moist forests to dry savannah woodlands. Montane forests are found in pockets in high-altitude, high-rainfall areas of Ethiopia, Kenya, Malawi, Mozambique, Tanzania, Uganda, Zambia and Zimbabwe, while lowland tropical moist forests are mostly found in Angola and Uganda. The Miombo woodland ecoregion includes the Eastern Miombo Woodlands, Central Zambezian Miombo Woodlands, and the Zambezian Baikiae Woodlands. Acacia woodlands cover vast tracts of arid and semi-arid area where rainfall is low and soil is suitable. The deciduous forests of Madagascar are the world's richest and the most distinctive dry forests in the region with high degree of plant and animal endemism. The East African Coastal Forests comprise the Northern and Southern Zanzibar-Inhambane coastal forest mosaics. Stretching from southern Somalia through Kenya and Tanzania, to southern Mozambique, this biome is characterized by tropical dry forests within a mosaic of savannahs, grassland habitats and wetland areas. The area also

includes the larger offshore islands of Pemba, Zanzibar, Mafia and the Bazaruto Archipelago, as well as the smaller isles in the Indian Ocean. Mangrove forests are common along the coast with large concentrations in Mozambique, Tanzania and Kenya.

Arid and semi-arid ecosystems

The most common habitats include grasslands, savannah, karoo, desert and fynbos. The Vast Horn of Africa region encompasses most of Somalia, Djibouti, and parts of Ethiopia, Eritrea, Kenya, Yemen, Oman and Sudan. The region also includes the Socotra Archipelago off the coast of northeastern Somalia, plus a few hundred islands in the Red Sea. A significant part of Madagascar is dry sub humid, including a unique spiny desert in the far south.

Freshwater ecosystems

The region is rich in major freshwater ecosystems including rivers, lakes, flood plains, swamps/marshes, and a variety of seasonally wet areas such as dambos and pans. Notable freshwater ecosystems include the Nile, Zambezi, Okavango, Kafue, Tana, Victoria, Tanganyika, Malawi, Mweru, Turkana, Alaotra, Albert, Tana, Chilwa and Bangweulu systems. Eastern Africa is particularly rich in wetland biodiversity.

Coastal and marine ecosystems

The region's coastal and marine ecosystems include dry coastal forests, coastal dunes, floodplains, freshwater and saltwater marshes, mangrove forests, coral reefs, lagoons, sandy beaches and rocky shores. Ten of the 22 ESA countries on mainland Africa have coastlines; four are islands. The coastline along the Atlantic Ocean is characterized by long sandy beaches interspersed with rocky outcrops while that of the Indian Ocean is rich in coral reefs and mangroves. These systems host a diversity of species and support important fisheries. They provide construction materials, energy sources and support wildlife habitat and are an important tourism destination. Coral reefs are the richest of these ecosystems. The Red Sea coral reefs off the coasts of Djibouti, Eritrea, and Somalia are in the best good condition, with 30-50 per cent live coral cover and the richest diversity of coral and other reef species in the entire Indian Ocean. Sea-grasses occur as dense turfs in shallow and calm waters, and provide shelter, food and nursery areas for some of the important and valuable species of fish and shellfish, mammals such as the dugong (*Dugong dugong*) and the green turtle (*Chelonia medas*).

1.2. Species diversity

The eastern and southern African region contains remarkable species diversity. This species richness is not evenly distributed, however. For example, the diversity of terrestrial mammal species is highest in eastern Africa while Madagascar and the Western Cape have the highest plant diversity.

The Central Zambezian Miombo woodlands located in Zambia and Tanzania is a center of bird diversity but not plant diversity. Ethiopia and the Upper Nile are recognized as global centers of crop plant genetic diversity. Uganda is ranked among the top ten countries in the world in terms of animal and plant diversity, and specifically, diversity of mammalian species.

The largest number of marine mammals is found off the eastern coast from Kenya to Mozambique and around the Western Indian Ocean states.

In terms of bird species diversity, Tanzania (1,050 species), Kenya (1,019 species), Uganda (988 species) and Angola (894 species) are the richest, and rank among the top 20 countries in the world with the highest numbers of bird species. The Great Rift Valley (GRV), which cuts through the region from Ethiopia to Zambia, is the most species-diverse migratory route for Palaearctic birds flying between Eurasia and Africa and the most important raptor and soaring bird migration corridor in the world. Besides Palaearctic migrants, there are Afrotropical migrants that use the GRV sites, including some specialized and highly itinerant inhabitants of the saline Rift Valley lakes, such as the Lesser Flamingo *Phoeniconaias minor,* which breeds almost exclusively in Lake Natron in Tanzania.

Recent assessments of freshwater biodiversity in eastern and southern Africa identified Lakes Malawi and Tanganyika, as containing exceptionally high numbers of freshwater species. South Africa ranks as the third most biologically diverse country in the world, mainly because of the richness of its plant life.

The Western Indian Ocean region exhibits a high level of species diversity, including more than 2,200 species of fish, over 300 species of hard coral, 10 species of mangrove, 12 species of seagrass, over 1,000 species of seaweed, several hundred types of sponge, 3,000 species of mollusks, 300 species of crabs and more than 400 echinoderms. The Eritrean Red Sea coast and the 350 islands of the Dahlak Archipelago support fertile fishing grounds, with over 1 000 species of fish, 220 species of corals, and 851 km^2 of mangrove forests.

1.3. Iconic species and ecological processes

The ESA region is home to some of the world largest remaining populations of iconic species including elephants, black and white rhinoceros, lions, cheetah, mountain gorillas and chimpanzees. The region boasts superlative wildlife phenomena, including the last large ungulate migrations left on the continent: the wildebeest

migration in Tanzania and Kenya, and the White-eared Kob/Tiang/Mongella gazelle migration in southern Sudan, which have survived despite the protracted armed conflict in the country. Botswana has the largest African elephant population, estimated at 28% of the known global population. Tanzania is the remaining stronghold for lions with 16,800 animals from an estimated continental population of 23,000-39,000. These "flagship species" and wildlife spectacles are of enormous economic value to the tourism industries of the countries in the ESA region.

1.4. Species endemicity

The ESA region hosts a large number of endemic species. In Madagascar, the endemic species richness relative to the land mass area is unparalleled: 181 mammals, 104 bird species, 241 endemic amphibians, 14 freshwater crabs, three reef-forming coral species, 6 endemic conifers. In terms of mammal endemicity, Madagascar ranks number one followed by Ethiopia, South Africa and Tanzania. For birds, Madagascar also tops the list followed by Mauritius, Tanzania and Ethiopia. More than 80% of South Africa's 18,000 vascular plants are endemic. Seventeen per cent of all identified plant species in Somalia are endemic, which is the second-highest level of floral endemism in continental Africa.
Madagascar tops the list with the greatest number of threatened species (636), followed by Tanzania (580 species) and Somalia (398 species). Kenya also has a large number of threatened species (311), followed by Mauritius, Mozambique, Uganda, Seychelles and Malawi, all of which have more than 150 species threatened with extinction.

1.5. Important Biodiversity Areas

The ESA region hosts seven of the eight ***biodiversity hotspots*** in Africa and several ***Key Biodiversity Areas.***

African biodiversity hotspots have been designated on the basis of both existing biodiversity and the threats to that biodiversity with the intention of focusing protection efforts on these valuable areas.

The ESA region hotspots are as follows:

The Cape Floristic Region hotspot - encompasses an entire floral kingdom, and holds five of South Africa's 12 endemic plant families and 160 endemic genera.

The coastal forests of East Africa hotspot - renowned for extraordinary plant diversity. For example, the 40,000 cultivated varieties of African violet, which form the basis of a US$100 million global houseplant trade, are all derived from a few species found in the coastal Tanzanian and Kenyan forests. Several endemic and highly threatened primate species also occur in this hotspot.

The Eastern Afromontane hotspot includes the Albertine Rift which harbors more endemic mammals, birds, and amphibians than any other region in Africa. It also includes the species rich Lakes Tanganyika and Malawi with incredible freshwater diversity. Primates include the Mountain Gorilla (*Gorilla beringei beringei*) and the Eastern Chimpanzee(*Pan troglodytes schweinfurthii*).

The Horn of Africa hotspot - an entirely arid area, home to a number of endemic and threatened antelope species including, the Beira (*Dorcatragus megalotis*), the Dibatag (*Ammodorcas clarkei*), and Speke's gazelle (*Gazella spekei*). This hotspot also holds more endemic reptiles than any other region in Africa. The endemic Somali wild ass (*Equus africanus*) and the Sacred baboon (*Papio hamadryas*) also occur.

Madagascar & Indian Ocean Islands hotspot has astounding biodiversity with high endemism and high levels of threat. These include several species of lemur, a clade of *strepsirrhine* primates endemic to the island of Madagascar.

The Maputaland-Pondoland-Albany hotspot is an important center of plant endemism with nearly 600 tree species, the highest tree richness of any temperate forest on the planet.

The succulent Karoo hotspot boasts the richest succulent flora on earth. Sixty-nine percent of all the plants that occur there are endemic. The area also has relatively high reptile endemism. Protected area coverage in this hotspot is poor, although the reserve system is currently being expanded, notably with the creation of the 600 km^2 Namaqua National Park in South Africa (ESARO dryland site analysis). Namibia has recently designated its entire coastline as a protected area.

2. Overview of conservation areas

2.1. Background and trends

Most formal protected areas in the ESA region were set up during the colonial era to protect particular species from overexploitation, usually large mammal aggregations that were considered as important "game". These protected areas typically excluded people, often forcibly removing communities that were resident in the area. The principle which guided establishment of most protected areas was that strict protection was essential for effective conservation of biological resources and therefore the exclusion of humans, livestock and fire was considered necessary.

In the 1980s colonial era conservation policies in Africa became increasingly under attack. Many species were under threat from illegal off-take and conservation goals were not being achieved. The concept of sustainable development spurred initiatives for more local community involvement in natural resources management. In line with this thinking, policies began to focus on sustainable use and increased local participation. There was a realization that a "fences-and-fines" approach leads to more conflicts, unacceptable social inequity, and ultimately the

destruction of the resources themselves. Over the last several decades, there has been a growing voice in the conservation community advocating for protected areas to contribute more to sustainable development if they are to persist in the face of growing human populations and poverty in the developing world. This is based on the belief that unless they become more relevant to countries' development strategies and the rights and needs of local people, many protected areas will come under increasing threat. Furthermore, since most protected areas in the world have people residing within them or dependent on them for their livelihoods, the conventional exclusionary approaches have engendered profound social costs. This is particularly true when the affected indigenous peoples and local communities were already, even before the protected area intervention, among the most marginalized groups.

Developments towards greater community involvement have taken two different tracks: a "minimalist approach" that sought to give local communities around national parks limited access to benefits, and community based natural resources management (CBNRM) that devolved tenure and responsibility for management to autonomous local institutions. The CBNRM approach has evolved faster in southern Africa. For example, in Zimbabwe, the Communal Areas Management Program for Indigenous Resources (CAMPFIRE) program targeted sparsely populated communal land adjacent to national parks or hunting areas. It demonstrated that economic returns from sustainable use of wildlife (largely through trophy hunting) exceeded the returns from marginal cultivation or cattle ranching, and schemes were devised to return the proceeds of wildlife utilization to the local communities. In Namibia, a highly devolved CBNRM programme has proven to be sustainable and has been associated with significant increases in the country's wildlife populations.

In general, however, the various community-based approaches have yielded mixed results. Experience has shown that the equitable distribution of financial and social benefits from PAs can be problematic. Many CBNRM projects have facilitated capture of benefits by small elites at the local level, rather than at individual household level. It has become clear that transparency and accountability require whole communities, including women, to be genuinely involved in decision-making. Clarity over tenure of land and natural resources is fundamental to the success of these initiatives, both in terms of conservation of biodiversity and in the fair and equitable sharing of benefits derived from sustainable use. Local institutions need time to develop their managerial capacities; building on traditional institutions and governance structures, rather than imposing new institutional arrangements, is often much more successful in ensuring community buy-in and in designing effective means of participation. A shortfall in many CBNRM programs has been the tendency to view "local communities" as homogeneous entities rather than as assemblages of distinct sub-groupings each with its own interests and views on natural resources management.

In more recent years, particularly since the Vth World Parks Congress in 2002, there has been an increasing interest in and support for Indigenous and Community Conserved Areas (ICCAs). These are defined by the IUCN Commission on Environmental, Economic and Social Policy (CEESP) as "***natural and modified ecosystems, including significant biodiversity, ecological services and cultural values, voluntarily conserved by indigenous peoples and local and mobile communities through customary laws or other effective means***".

There are today many thousands Indigenous and Community Conserved Areas (ICCAs) across the world, including sacred forests, wetlands, and landscapes, village lakes, catchment forests, river and coastal stretches and marine areas. The history of conservation and sustainable use in many of these areas is much older than government-managed protected areas and the biodiversity conservation outcomes are often impressive. Yet, ICCAs are often neglected or not recognized in official conservation systems. This is beginning to change: some governments have now integrated ICCA's into their official Protected Area Systems, and the Vth World Parks Congress and the Program of Work on Protected Areas of the CBD accepted them as legitimate conservation sites that deserve support and, as appropriate, inclusion in national and international systems. CEESP has carried out important work on how to promote ICCAs in ways that strengthen the governance of indigenous people and communities, rather than undermining their initiatives.

ICCAs conserve, or have the potential to conserve, an enormous part of the Earth's biodiversity; potentially areas as large as that of government designated protected areas could be conserved. ICCAs help, or can help, in providing connectivity across large landscapes and seascapes, may contribute climate change adaptation, and can provide substantial environmental benefits, such as water flows and soil protection. ICCAs are often built upon sophisticated ecological knowledge systems, including sustainable use, which have stood the test of time. They are usually based on customary and/or legal territorial and tenure "common rights".

Despite the growing global recognition that local communities should have full rights to natural resource management, in recent years there has been a trend towards ***recentralization*** of natural resource

management, particularly wildlife management, in a number of countries including Botswana, Tanzania, Zambia and Zimbabwe. This stems from the competing state and private sector interests and increasing value of natural resources which have led to the conclusion that these resources are too valuable for ordinary people to own. Interventions by conservation NGOs, even those professing to be supportive of local communities, can unwittingly reinforce central power because of their own interests and ties to the central government of the states in which they operate.

Another relatively recent development in the ESA region has been the proliferation of privately owned sanctuaries. This is most obvious in South Africa, which has a large proportion of private land earmarked for conservation, but wealthy individuals have been acquiring large tracts of land for wildlife conservation purposes in other countries as well; a well-known example is the Singita Grumeti Reserve on the western side of the Serengeti National Park, financed mainly by billionaire Paul Tudor Jones, where a luxury tourism operation accompanied by heavy investment in anti-poaching and community work has resulted in a revival in wildlife populations.

For the countries in the ESA region, a major challenge is how to develop an effective mix of state, community and private action in specific contexts. IUCN's protected area categories provide a full spectrum of different options that can be used towards this purpose. However, more efforts are needed to raise awareness of the different types of protected areas, especially ICCA's, and the powerful role they can play in conservation and sustainable use of biodiversity.

2.2. Protected area coverage

Many of the countries in the ESA region have dedicated a large percentage of their land surface to some form of protection. Botswana, Eritrea, Tanzania and Zambia have attained protected area coverage of over 30%. On the other hand, less that 1% of the land area of the Comoros and Lesotho is protected (see table below). At the World Park's congress in 2002, the government of Madagascar pledged to triple its protected area coverage to 10% of the surface area of the country. In 2006, Eritrea announced it would become the first country in the world to turn its entire coastline into an environmentally protected zone, an accomplishment since achieved by Namibia.

Protected area to total surface area (percentage) in eastern & southern Africa region	
Angola	12.1%
Botswana	30.2%
Comoros	0.1%
Djibouti	no data
Eritrea	32.0%
Ethiopia	16.9%
Kenya	12.7%
Lesotho	0.2%
Madagascar	8.0%
Malawi	16.4%
Mauritius	2.5%
Mozambique	8.6%
Namibia	14.6%
Seychelles	6.4%
Somalia	0.7%
South Africa	6.1%
Sudan	4.7%
Swaziland	3.5%
Tanzania	38.4%
Uganda	26.3%
Zambia	41.5%
Zimbabwe	14.7%

(source: UNEP, Africa Atlas, 2008)

Transfrontier conservation areas

In recent years there has been a proliferation of transfrontier conservation areas (TFCAs), particularly in southern Africa. Example include: the Kaza-Kavango Transfrontier Conservation Area shared by Angola, Botswana, Namibia, Zambia and Zimbabwe; the Greater Limpopo Transfrontier Park between Mozambique and South Africa; the Kgalagadi Agreement establishing a park between South Africa and Botswana, and the Tuli Park between South Africa, Botswana and Zimbabwe. A number of other protected areas are located near international borders. While many of benefits of transboundary protected areas are political and economic, there are also significant biodiversity advantages: for example, as ecosystems seldom follow national jurisdictions a "beyond borders approach" makes ecological sense; large parks also have lower operational costs, and as TFCAs can support bigger wildlife populations, these are less prone to loss when conditions fluctuate. Populations of many mammal species, including great apes, elephants, carnivores and ungulates straddle international boundaries. Trans-boundary management is important for conserving such species in the long term.

To date the establishment and development of TFCAs has been largely government driven. This has contributed to a number of challenges, including: lack of local community acceptance, lack of awareness about the potential of

TFCAs to contribute to both biodiversity conservation and socio-economic development, and the lack of mechanisms for integrating other stakeholders (communities and private sector) in to TFCA development processes. Other limitations of TFCAs include:

- Differences between the participating states in their economic and administrative capacities, commitments, and national policies and strategies;
- Regional projects involving opening of borders are complex and result in lengthy processes due to the numerous concerned stakeholders and the necessary effort for coordination;
- Successful and sustainable collaboration requires extensive process-related initiatives, meetings, agreements, etc., which can be costly, both in terms of time and financial resources; indeed, high transaction costs are one of the largest constraints for TFCAs;
- Regional projects tend to neglect the principle of subsidiary, thereby weakening ownership by the national stakeholders and local communities. Ambiguous land tenure rights of communities and individuals, confusion and conflicts between governance and tenure and inequitable distribution of benefits are all exacerbating factors;
- Solutions need to be found to control animal diseases that can be transmitted from wildlife to livestock and strategies need to be in place to deal with other human-wildlife conflict. Botswana's beef exports to the EU for example depend on food-and-mouth disease-free grazing areas, which clashes with the principle of free-roaming wildlife;
- The tourism sector, much touted as a growth engine for economic benefits in the region, needs to start delivering economically tangible results on the ground, if local communities are not to lose interest, or worse, turn against biodiversity conservation.

World Heritage sites

The World Heritage sites in the ESA region include some of the most iconic national parks in Africa, many of which are of great importance for biodiversity conservation: e.g. the Serengeti National Park, the Simien Mountains, Aldabra Atoll, Cape Floral Region, Bwindi Impenetrable Forest and the Rainforests of the Atsinanana. These sites are considered to have **Outstanding Universal Value** which underscores their importance not just to the countries in question but to the world at large.

Gaps in conservation area coverage

Although no thorough gap analysis exist for all countries in the region, the current protected area coverage does not appear to correspond very well with the distribution of biodiversity across the region. For example, most of the biodiversity that persists in southern Africa occurs outside formal protected areas and many restricted range species are not adequately included in protected areas. The protected area network does not adequately cover dryland, coastal and marine, or mountain ecosystems. The least protected areas are found in Madagascar, the drier parts of South Africa and in the most heavily deforested sites in eastern Africa. Some of the least well-protected eco-regions are those with high biodiversity values, including the Eastern Arc forests, the succulent Karoo, the Ethiopian montane forests, the lowland Fynbos, the east African montane forests and the Northern Zanzibar-Inhambane coastal forest mosaic. The current network of protected areas is also generally not designed to target freshwater and marine species. For example, of the 112 main river ecosystems in South Africa, only 16 are moderately to well represented within protected areas. Many species with large range requirements are also poorly covered: in Tanzania, only 45% of the total range of lions is covered by protected areas and 60% of the country's chimpanzees live outside protected areas. In southern Africa, three quarters of cheetah range, and two thirds of wild dog range, falls on community and private lands.

Some recent work has been carried out to analyze to what extent World Heritage sites protect important biodiversity in the region. A preliminary exercise being undertaken by the UNEP-WCMC and IUCN is looking at biological value of potential WH sites in order to arrive at a priority shortlist. Criteria used include biogeographic provinces, ecoregions, biodiversity hotspots; marine, freshwater and terrestrial Global 200 priority ecoregions; Centres of Plant Diversity, Endemic Bird Areas, Important Bird Areas, Key Biodiversity Areas, Alliance for Zero Extinction sites and priority areas for great ape conservation. Based on these criteria, the following sites have been identified in the ESA region as priorities for future World Heritage nomination:

- Okavango Delta, Botswana
- Namib Desert, Namibia
- Succulent Karoo, Namibia and South Africa
- Sanganeb Atoll Marine National park, Sudan
- Southern Red Sea, Djibouti, Eritrea and Sudan
- Bale Mountains National Park, Ethiopia
- Saline Rift Valley Lakes, Ethiopia, Kenya and Tanzania
- Eastern Arc Mountains, Kenya & Tanzania
- Madagascar Dry Forests, Madagascar

The eco-regions under the best protection tend to be the savannah habitats, especially those containing charismatic animals, such as large mammals to, for example, plants (Burgess et al. 2005). This reflects the colonial-era preoccupation with large mammal concentrations. However, the long-term viability of the ecological systems and processes on which such areas depend remains questionable. Species loss has continued and in nearly all cases, category I-IV protected area boundaries were established with little regard for the year-round needs of resident fauna. For example, the Nairobi National Park and Maasai Mara reserve in Kenya were originally designed to conserve populations of migratory mammals

whose movements have since been severely restricted. Climate change is likely to increase the importance of connectivity between protected areas (see box below).

Conservation of large, intact ecosystems at a scale that maintains ecosystem structure and diversity, with populations of species large enough to survive over time is a key priority for combating impacts of climate change. Such areas protect both known species and species not yet been described by science. Ecological processes may be as important as species or habitats. The conservation of large intact ecosystems may be an important measure for sustaining the populations of species in areas where climate change will reduce habitat condition. For example, water dependent antelope and other large fauna in areas of Africa likely to witness water stress, may need access to large dry season forage areas. Failure to provide for this may lead to the collapse of wildlife populations, including those of economic importance (for example, species that are important to the tourism industry).

Protected areas that remain as isolated units, surrounded by a radically altered habitat, almost always face serious viability problems over the long term. Creating or restoring functional linkages between protected areas and their surrounding regions is vital to ensure ecological coherence and resilience for both biodiversity conservation and sustainable development. Given this knowledge, it is unlikely that populations inside the current system of category I-IV protected areas would be viable if isolated from unprotected lands. Therefore, conservation activity outside the traditional network of protected areas is absolutely critical for the long-term survival of many species.

To include all vertebrate and plant species occurring in Sub-Saharan Africa in protected areas, about a third of its total area would need to be included in conservation strategies. Hence, identifying locations of high biodiversity in several major groups, so that a high proportion of biodiversity can be protected in a comparatively small area, is an important goal.

The key issues for establishing an effective protected area network are prioritization of levels of protection and use. Identifying protected areas should not be arbitrary. Sufficient knowledge exists to apply more refined techniques to identify locations that are critical for many species, robust to climate change, and have a good chance of being economically viable. As discussed above, consolidated and connected reserves are more viable than the equivalent area of isolated patches. There are known priority areas for conservation in every country, but the many different systems currently being used to prioritize areas (ecoregions, hotspots, heartlands, key biodiversity areas, conservation landscapes, etc.) can sometimes complicate the decision-making process…

More information: leo.niskanen@iucn.org

Job offer

The Royal Society for Protection of Birds is currently advertising for a West Africa Partner Development Officer to support her partner development work initially in Sierra Leone and Nigeria. For more information please see:

http://www.rspb.org.uk/vacancies/details/298950-partner-development-officer-west-africa

Position based in UK and submission expected before the 11th of January 2012

Reminder

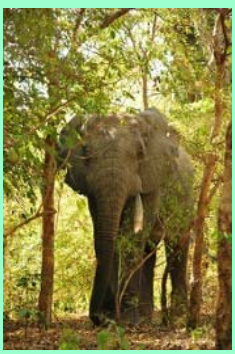
Papaco's current offers…

- we are looking for an expert to deliver a **training course on possible impacts of extractive industries** located around protected areas and **ways to mitigate them** in relationship with PA staffs and PA partners… ToRs are available on www.papaco.org. Technical and financial proposals should be send in French at: beatrice.chataigner@iucn.org. Deadline: December 31th, 2011.

- we are also looking for an expert to realize a **feasibility study on an e-learning program** for west african protected areas managers and partners. Technical and financial proposals for this consultancy should be sent in French at the following address: souleymane.konate@iucn.org. Deadline: January 31th, 2012

► APAO Newsletter ◄

Contacts: geoffroy.mauvais@iucn.org
bora.masumbuko@iucn.org
beatrice.chataigner@iucn.org
youssouph.diedhiou@iucn.org
lacina.kone@iucn.org
souleymane.konate@iucn.org
thomas.bacha@iucn.org
arsene.sanon@iucn.org



UICN, Program on African Protected Areas & Conservation
BP 1618,
Ouagadougou 01
BURKINA FASO

TEL: (226) 50 36 49 79

www.papaco.org