

# ***IUCN in West Africa- Challenges and Opportunities***

## **INTRODUCTION**

The West African region covered by IUCN-BRAO comprises 17 countries: Cape Verde, Senegal, Mauritania, the Gambia, Guinea, Guinea Bissau, Mali, Sierra Leone, Liberia, Côte-d'Ivoire, Ghana, Burkina Faso, Niger, Togo, Benin, Nigeria, and Chad. It extends over a surface area of 7,500,000 sq. km with a population of nearly 250 million inhabitants, or an average density of 33 inhabitants per sq. km. With the exception of Chad and Mauritania (members of the Permanent Inter-States Committee for Drought Control in the Sahel<sup>1</sup>), IUCN-BRAO's target region corresponds to the ECOWAS (Economic Community of West African States) space. Eight of the fifteen ECOWAS member states --the CFA franc zone-- form an economic and monetary space: the West African Economic and Monetary Union (UEMOA).

The presence of IUCN in West Africa was formalized in the mid-1980s with the starting of the Sahel Programme. The first country offices were open in Mali, Niger, Burkina Faso and Senegal. In 1997, the regional office (BRAO) was established in Ouagadougou, Burkina Faso. Today, the presence of IUCN in West Africa is through five (5) country representations (in Guinea-Bissau in addition to the above-mentioned offices), one liaison office (Mauritania), two project offices (Ghana and Benin) and a regional office.

IUCN activities in the region were adapted following periodic programmatic adjustments. Although the Sahel is still a priority intervention zone, IUCN's strategic focus areas have become diverse, going beyond the scope of the desert control theme.

The current context of West Africa is undergoing changes. While some recent trends such as improved political and social stability and strengthened regional integration create a more favourable environment for the promotion of sustainable development, some challenges are still important. One of these challenges is the extreme poverty among the majority of the population whose daily survival needs shorten the planning time scales. Also, rapid population growth and (legitimate) development needs further increase the pressure on natural resources.

The current IUCN-West Africa programme has largely taken the poverty issue into consideration and is trying to reconcile it with ecosystem conservation and restoration objectives. In the future, this approach should be reinforced in order to make it more systematic. Sustainable development in West Africa cannot take roots unless it integrates the need for improving the living conditions of the people.

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<sup>1</sup> The Permanent Inter-States Committee for Drought Control in the Sahel (CILSS) comprise 9 member States: Chad, Mauritania, Cape Verde, Senegal, The Gambia, Guinea Bissau, Mali, Burkina Faso, Niger.

## Geographical coverage of IUCN in West Africa



### 1. REGIONAL CONTEXT

West Africa is one of the poorest regions in the world. The UNDP 2000 report on sustainable human development shows that of the 30 least advanced countries, 14 are in West Africa, which means all countries in the region with the exception of Liberia (which was not classified), Ghana and Cape Verde. Even at the level of Africa, West Africa is among the poorest regions in the continent. A recent report of the African Development Bank (*Fostering Good Governance in Africa*, 2001) estimates West Africa's average per capita Gross Domestic Product (GDP) at USD 340, against a continental average of more than USD 700.

This situation of extreme poverty poses a double challenge in terms of promoting sustainable development. First, survival needs tend to put concerns of sound use or protection of natural resource in the background because in a situation of extreme poverty, people do not hesitate to destroy their environment so as to postpone their own destruction. In addition, to be successful, any conservation programme should contribute to ensuring the social and economic advancement of the people or at least participate in poverty reduction. Yet, experience shows that social and economic progress often goes hand in hand with increased pressure on natural resources, on water, forests, lands, wildlife, etc.

The fresh water resource is an illustration of increased pressure on natural resources in West Africa. The current level of fresh water use (11.43 billion m<sup>3</sup> per year) in the West African region represents only a little proportion (a little more than 10%) of the total available fresh water in the region, estimated at 1062.6 billion m<sup>3</sup> of water (surface water and renewable underground water). But, with the current trends, the amount of water required every year to meet domestic and industrial demands and irrigate adequate land to ensure food security in

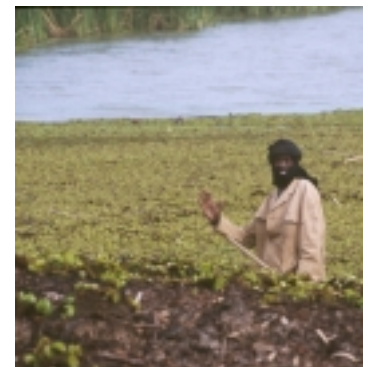
West Africa would increase to about 60 billion m<sup>3</sup> in 2025<sup>2</sup>. This means that if the trends were maintained, the current level of fresh water withdrawals would increase fivefold in the region. Even though the use of more efficient farming systems can be envisaged in order to curb the demand, water needs in the region would continue growing significantly in the coming years. Responding to the growing demands for agricultural production, power generation and industrial and domestic use, will maintain strong pressure on available resources. Surface water resources in the region will be subject to an increasing pressure in the future.

One of the characteristics of the West African region is that the highly marked contrast between wet and arid lands is considerably mitigated by the hydrographical configuration. Major watercourses in the region (Niger, Senegal, Gambia, Volta, Lake Chad system) originate from the wet Sudanian regions, which receive good rainfall, before crossing the Sahelian areas where rainfall deficits are chronic. These watercourses thus allow inter-zonal transfer of fresh water from wet to arid lands. Thus in the Sahel, floods annually inundate vast surface areas covering up to 4.6 million hectares of land in the years of good rainfall. Among the Sahelian floodplains shaped by the yearly flood, the inner delta of the Niger River (3 million ha), the middle valley of the Senegal River (500,000 ha) and the Hadejia Nguru area in Northern Nigeria (400,000 ha) are the largest. Hosting a very rich biodiversity (especially in terms of plant, fish and bird species), these plains are also famous for their key roles as supports for productive activities at the local level (recession farming, livestock breeding, fisheries).

Forests are also an illustration of the danger threatening natural resource in the region. According to FAO (*State of the World's Forests, 2001*), nearly 1.3 million ha of forests were lost in West Africa during the 1990-2000 decade. The same source estimates that Africa accounted for 56% of the 9 million ha of forests lost globally. This shows the magnitude of looting of primary forests in the continent, including in West Africa. The reasons for this situation are similar to those underlying the use of water resources: high dependency of national and domestic economies on the exploitation of available natural resources, rampant poverty, etc.

## 2. CHALLENGES TO SUSTAINABLE DEVELOPMENT

*Invasive aquatic weeds:* Over the past few years, many surface freshwater resources in the region experienced the invasion of aquatic weeds. The proliferation of species, such as water jacinth (*Eichhornia crassipes*), water fern (*Salvinia molesta*) and water salad (*Pistia stratiotes*), has reached alarming scales in many watercourses in the region. These invasive weeds impede development activities such as inland navigation, irrigated agriculture, fisheries, etc. They also host vectors of diseases like malaria and bilharzias and threaten the aquatic biodiversity by contributing to the eutrophication of water bodies.



*Climate Variability and change:* Since the early 1970s, West Africa is undergoing significant water shortages. The average rainfall deficit of the 1971-1990 period was 180 mm per year compared to the average of the 1951-1970 period. Deficits were at least as severe for surface watercourses in the region. In the Niger and Senegal Rivers, the mean flow rate dropped by 30% and 60% respectively during the 1971-1989, compared to the 1951-1989.

*Shared Resources: towards a "Tragedy of the Commons"?* Watercourses in the region are increasingly targeted to respond to the growing food and energy needs. This is reflected in

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<sup>2</sup> . Quoted in *Water for the 21<sup>st</sup> Century: Vision for West Africa*. Document presented at the Second Global Water Forum at The Hague from 17 to 22 March 2000. pp. 12-13

the notable increase in large dams in the region, today estimated at 106. On the Niger River alone, there are 9 such large dams which are either under construction (Kampe in Nigeria) or under more or less advanced planning (Fomi, Tossaye, Kandadji, Zunguru, Onitsha, etc.). Guinea and Benin are respectively planning to build 4 and 5 large dams for power generation in the next 25 years. Overall, every single country in the region has its own plans for building one or several dams, often in sections of shared watercourses without real consultation with neighbouring countries and without taking into consideration the lessons learned from world experience with large dams.

*Fragmented management of shared natural resources:* West African countries are highly inter-dependent with regard to fresh water resource use and management. The main river systems in the region are shared among several countries: Niger-Benou (9 countries), Senegal (4 countries), Volta (6 countries), Lake Chad (5 countries), Gambia (3 countries), and Comoe (3 countries). With the exception of Cape Verde, every country in the region shares at least one international watercourse. Despite this high interdependency, national legal frameworks have little room for sub-regional and regional cooperation in the area of water resource management. As a result, the region is not well prepared for designing and implementing mechanisms for appropriate management of the river systems covering several countries. Countries in the region therefore have difficulties in responding in a concerted and effective manner to problems like waterborne diseases (bilharzias, malaria) or the proliferation of invasive aquatic weeds (e.g. *Salvinia molesta*, *Pistia striototes*, water jacinth). Positive dynamics of concerted action have however been noted here and there, as in the case of onchocerciasis control and more recently the collaboration between Senegal and Mauritania in the fight against the *Salvinia molesta* in the delta of the Senegal River. These are however exceptions rather than the rule.

*Institutional enclosures.* The juxtaposition of national structures for water resource management is a major constraint to the conservation of the biodiversity in internationally shared waters and wetlands (e.g. ichthyologic stock conservation, protection of migratory birds, etc.). This situation also hinders the capacity of the region to respond to problems of pollution, erosion or sedimentation, which often occur at the level of shared river basins or other transboundary ecosystems.

*Knowledge gaps on the impacts of implemented environmental policies.* Due to lack of reliable data and relevant indicators to describe the state of the environment in West Africa and its contribution to the well being of the populations, decision-makers often have real problems including the environmental component in their development policy (difficulty to mainstream environmental programmes in strategic poverty plans for instance). There is a real need for having reliable and high-quality environmental information for policy makers. Unfortunately, current project experiences tend to use their own data collection and processing methods, their own indicators and produce their own information, which leads to often contradictory results.

*Poverty, population growth, and increased pressure on natural resources:* In West Africa, the majority of the population (nearly 80 % in some countries) still live in rural areas and draw the greatest share of their income and livelihoods from natural resources. Rapid population growth and the sustained use of extensive or inappropriate production systems (due to lack of financial, technical and educational means) are such that the various ecosystems present in the sub-region (forests, savannahs, river basins, coastal ecosystems etc.) are undergoing pressures that reduce their productive potential. The reduction of the land productivity may result into malnutrition, famine, and displacement of the population or even conflict. Knowing that the population in the sub-region will double in the next thirty years, the issue raised is to know how to manage and find shelter, food and jobs in acceptable conditions for this population in view of ensuring their well being and preserving the resources on which nature depends.

### 3. THE STRATEGY OF IUCN IN WEST AFRICA

The long-term objectives of IUCN-BRAO are to:

- assist in the restoration and sustainable management of ecosystems in the West African region;
- contribute to the setting up of policies and institutions, which enable sustainable development;
- promote incentives (including financial ones) for the conservation of the biological diversity;
- assist in the equitable sharing of the costs and benefits of sustainable natural resource management;
- assist in mobilising the investment required for improving knowledge on biodiversity and relevant socio-economic factors;
- assist in developing environmental information and communication management systems.

### 4. ACTIVITIES

#### Wetlands

The wetlands programme is the oldest and the most developed in the region and the only programme that receives constant support from IUCN global thematic programmes. Activities in all IUCN work areas are implemented based on this programme and its project sites. The main sites on which the programme is being built up and where IUCN is directly involved in developing participative and equitable management, are the National Parks of Diawling in the south-west of Mauritania and of Djoudj on the other side of the border in Senegal, and the biosphere reserve of Delta of Saloum south of Dakar. These parks have enabled the rehabilitation of endangered ecosystems as a result of large-scale development operations and more recently, they have had good results in combating invasive aquatic plants, which were a serious threat to the survival of these ecosystems. The programme also feeds sustained collaboration with the National Park of Banc d'Arguin in the northwest of Mauritania, a site registered as a world heritage.

The programme provides scientific assistance for the study and management of yellow mullet populations (*Mugil cephalus*), an essential fish species in the regional economy, and participates in planning the development of the whole of the Mauritanian littoral.

The inlands programme essentially worked in the inner delta of Niger (the second largest inner delta in Africa) and in northern Nigeria, in the Lake Chad basin. These two latter projects were completed and BRAO as part of the Water and Nature Initiative (WANI) is exploring means of developing new projects that would build on these long and fruitful experiences

Collaboration efforts were undertaken with river basin agencies in the region, the Senegal and Niger Rivers in particular. In the Senegal River basin, OMVS (the river basin authority) and the World Bank have particularly welcomed the role played by IUCN in organising a completely new framework for dialogue between the river basin authority and civil society, at the local, national and regional levels.

The programme is also implementing a series of training, exchange and capitalisation activities through the universities of Nouakchott and Ouagadougou and a variety of national and West African networks (network on flood plains and coastal planning).

## **Marine and coastal planning**

The programme has been built upon the long experience of Guinea-Bissau, and complemented by those of Mauritania and Senegal mentioned above. In Guinea-Bissau, IUCN initiated the process that resulted in the establishment of five protected areas, including the archipelago of Bijagos. Successful experiences in terms of participatory management and conservation of protected marine species, in particular turtles, have helped IUCN to suggest the development of a strategy for the management of protected marine and coastal areas across the country.

The study of migratory species, such as marine turtles, has shown the interest of having a regional approach covering the coastal areas experiencing the upwelling in West Africa. That is the reason why WWF, FIBA (Fondation Internationale du Banc d'Arguin) and IUCN are jointly implementing a sub-regional programme dedicated to the management of marine and coastal ecosystems, coordinated from Nouakchott. The programme is planning to further strengthen institutional and legal frameworks, management tools for protected marine areas and to develop exchanges and communication between countries in the sub-region.

## **Desertification**

The regional office was until recently the focal point of IUCN for the implementation of the Convention to Combat Desertification (CCD), a phenomenon the most affecting the African continent. The programme recently set in place within BRAO proposed a new approach to the Desertification Initiative for West Africa in which priority is given to providing technical expertise to IUCN offices and members in the region, capacity building for the implementation of the CCD and synergy with the other conventions, developing incentives for the implementation of the CCD.

A project covering the whole of the region trained more than a hundred actors involved in desertification control, from decision-makers to representatives of producers, in order to promote the inclusion of the social dimension in desertification control actions.

## **Forests**

The forest component of the regional Programme is still embryonic. BRAO wishes to establish close relationships with the Global Forest Programme and to initiate in particular a study and reflection process on the Forest Landscape Restoration initiative, comparable to the process that was launched in East Africa. A project on Non Timber Forest Products is being considered, in partnership with the Swedish development cooperation. Also, BRAO wishes to join the Global Programme on Sustainable Livelihoods, which was recently initiated as part of 3IC.

## **Protected area management**

IUCN was behind the establishment of five protected areas in Guinea-Bissau and is studying the creation of a new transboundary protected area with Guinea. In Senegal, Mauritania, Guinea-Bissau and Ghana, IUCN is directly involved in the management of nine protected areas. In Benin, Niger, Mauritania and Burkina Faso, IUCN is indirectly involved or was until recently involved in the management of six more protected areas. In all cases, IUCN involves the riparian populations in the identification of the resources to be preserved, the definition of objectives, and the sustainable and equitable management of these resources based on relevant scientific research work. Everywhere, IUCN emphasises the importance of developing natural resource management systems and the local human structures that would

take responsibility for such structures. In Ghana, IUCN is involved in the implementation of the reform of the Wildlife Division at the country level.

Experiences of transboundary management of protected areas were multiplied in the past few years, in which IUCN plays a key role as a facilitator among the States (e.g. Senegal and Mauritania; Senegal and the Gambia; Guinea-Bissau and Guinea.) The mobile nature of the African fauna requires that IUCN supports the current work on the harmonisation of the delimitation and the management systems of transboundary corridors used by big fauna species, in particular elephants.

### **Local management of natural resources**

In West Africa, IUCN has empowered the local communities for taking up new responsibilities in natural resource management. In the inner Delta of Niger, in Mali, IUCN has facilitated the signing of four local conventions on the management of natural resources, which establish a dialogue for the first time in the region between fishermen, farmers and pastoralists. Also in Mali, IUCN has helped in rehabilitating dry season grasslands, wetlands that are indispensable to pastoral systems. In the southwest of Niger, IUCN has assisted the owners of palm tree plantations in explaining to the State authorities the rationale and economic interest of traditional management systems. In the national reserve of Aïr and Ténéré, in the Niger Sahara, a site of world heritage, IUCN has facilitated the development of a democratic model of organisation for the management of rangelands of Touareg nomads. In Niger, non-timber building techniques used in more than 1,000 houses and public buildings are developing rapidly and serve to promote cautious community management of timber resources in village lands.

In Benin, Burkina Faso and Côte d'Ivoire, projects assist communities in the management of natural resources in their lands and facilitate participatory management of protected areas. In the biosphere reserve of the Delta of Saloum in Senegal, in the Rio Grande of Buba in Guinea-Bissau, the communities have developed sound resource management systems, which helped to improve the state of shrimp and barracuda populations and to structure a dynamic economy of natural resource procession, which increases the income of the communities.

In Burkina, the domestic energy project developed by the Danish cooperation with the objective of sustainable management of wood energy resources at the country level, has requested IUCN to develop and conduct the monitoring and evaluation of the project.

### **Species**

The regional programme collaborates in the MIKE (Monitoring of Illegal Killing of Elephants) project, which trains conservation teams across the region for improved monitoring of anti-poaching activities. A mission officer of the African Elephant Specialist Group facilitated the development of a strategy for the conservation of elephants in West Africa and is ensuring the promotion and implementation of the strategy in all countries in the region. Studies were conducted on behalf of CITES on the status of the parrots in Nigeria, Guinea and Guinea-Bissau.

On the coast, studies give evidence of the migration of marine turtles between the different marine and coastal protected areas of Guinea-Bissau, Senegal and Mauritania. The marine and coastal programme provides support to the conservation plans for sharks, skates and other protected marine species.

### **Economic development of the environment**

A regional Programme on *Environmental Economics* was launched in 2001 to strengthen the use of concepts and economic tools within the regional IUCN programme and among its partners and to conduct evaluations studies on ecosystems, such as the wetlands in the National Park of Diawling.

In Senegal, comprehensive survey has highlighted the importance of natural resources for Senegalese populations in particular in subsistence economy and enabled an initial evaluation of their key contribution to the economy of the country.

### **Education – communication**

Environmental education and communication are (in theory) taken into account in all projects and programmes in the region. Niger, Burkina Faso and Guinea-Bissau have developed major environmental education projects designed for the communities and different types of schools and they have produced many newsletters and newspapers for nearly ten years. The Senegal office is testing the use of modern information and communication technology to promote environmental information flow among pastoralist communities.

The regional office has undertaken the development of a communication strategy in order to further master this dimension of its expansion.

However, it should be recognised that communication remain one of the weakest components of the Programme. No communication specialist exists in the whole of the region. When communication efforts are made they remain isolated and poorly structured at the regional level. This situation ruins the reputation of IUCN and hampers the dissemination of IUCN achievements. The situation is such that even IUCN Headquarters, the Commissions and other IUCN offices know little about the field results achieved over the years.

Another serious consequence is that communication with the members is limited to the sending of periodical reports, and letters. There is no mechanism intentionally put in place to establish systematic relationships with the members and to receive their feedback, get their real commitment to the implementation of our programmes. Because the office is understaffed, relationships with the members are managed by a senior staff that is already 120% busy with other programme duties.

### **IUCN contribution to the major challenges to the region**

Regarding the challenge of alleviating poverty as part of conservation activities, significant progress has been made over the last years. The Djoudj National Park project (Senegal) illustrates current trends in IUCN approach to promoting sustainable development in the West Africa Region (see box). In this approach, nature restoration and conservation is conceived in a participatory manner with full involvement of local populations who are also targeted as project beneficiaries. In the recently completed Youwaru project in the Inner Delta of the Niger River (Mali), in the Diawling National Park (Mauritania) and in the other IUCN conservation projects (including Guinea-Bissau) a similar approach is promoted.



***Involving local population in the benefit sharing of ecosystem conservation activities – Example of the Park of Djoudj (Senegal)***

*The implementation of the management plan of the National Birds Park of Djoudj (Senegal) has enabled, among other things, the increase of the carrying capacity for aquatic migratory fauna of the Park. Thus, more than 2 million birds of 360 species winter in the Park until the month of March and, during the last two years, extend their stay until May. Adding to this is the good reproduction of crocodiles. This good health of the Park ecosystems has led to the development of tourism. In 2002, 14,000 tourists visited the Park and the income generated was beneficial to the State, private promoters and also local people. During the fiscal year 2001-2002, the village boat that takes tourists across the Park generated 9 million CFA F (or USD 13,000). The money was used for partly funding community development activities in peripheral villages.*

The regeneration of the ecosystem of the lower delta of the Senegal River (Mauritania) helped to revive traditional productive activities such as mat weaving, which uses *Sporobolus*, a plant species now available in the area after having virtually disappeared for decades.

Regarding the overall perception of IUCN role and impacts in the West Africa region, a good illustration is provided in the recent strategic review, which involved interviews of all IUCN members in West Africa and the great proportion of its partners. These interviews show a very positive image of IUCN in the region, specifically:

- the recognition of technical expertise in the area of biodiversity, ecosystem restoration and wetlands management,
- the recognition of technical expertise in the area of continental and coastal wetlands management,
- the significant IUCN contribution to the emergence of environmental concerns in policies and legislations,
- the successful use of participatory approaches in projects,
- the significant technical capacity building efforts for partners and local communities,
- the solid reputation of IUCN as executing agency.

It is in the area of study, conservation and development of wetlands (often as part of the management of protected areas) that the contribution of IUCN was the longest, the most consistent and the most significant since its establishment in the region in the late 1970s. Today, the wetlands programme, with marine and coastal areas working partly on common issues and areas, represents one of the fields in which the potential for the development of IUCN in the region is the greatest. The problem in these areas is one of the most crucial for the future of the region and the approaches implemented need to be taken a step forward, making the role of IUCN more important.

Furthermore, beyond the achievements on the ground, the promotion of new protected areas and dissemination of participatory management practices of protected areas, ecosystems, and natural resource in general terms, IUCN played a strong catalyzing role bringing together states and civil societies. The continuous presence of IUCN in a significant number of countries is a sign of stability and credibility. In all such countries, IUCN managed to identify and accompany actors, some of who have now become IUCN members. In several countries, partners highlight the significant role played by IUCN in retaining human resources in the region. Finally, by facilitating several networks, IUCN has helped in the flow of ideas, practices, as well as the evolution of policies and legislations through a network of collaborators and partners that few institutions have.

## **5. OPPORTUNITIES FOR THE FUTURE**

In view of taking up the new challenges and responding to emerging development issues in the region, IUCN should in its future action, lay special emphasis on poverty reduction, development, and sustainable management of shared resources. The current context of West Africa offers many opportunities for the success of such an approach.

The states in the region are increasingly aware of the value of the ecosystems that they host and of the need for ensuring sound management of these. This is shown by the fact that all of them, with the exception of Liberia and Cape Verde, have adhered to the Ramsar Convention. Today, West Africa has 46 Ramsar sites with a total surface area of 10,073,059 ha. More sites are added every year to that list. Although the registration in the list of Ramsar sites is not an end in itself and does not necessarily guarantee good management of the aquatic ecosystems concerned, it lays the foundations for building of a coherent strategy in support of the West African States for fulfilling their commitments as stakeholders.

It is probably in the area of political stabilisation that the region made the most significant breakthrough over the past decade. While in the late 1980s, the practice of pluralist democracy was rather exceptional (Senegal, the Gambia), today, all countries in the region have multi-party political systems with a relatively free press, and very active civil society. Cases of peaceful change in leadership are multiplying (Benin, Ghana, Senegal, Cape Verde, Mali). Decentralisation policies are being implemented everywhere to anchor democracy. Armed conflict and civil war are now rare, isolated and less bloody, even though the region remains highly vulnerable to political and social instability.

The New Partnership for Africa's Development is another positive signal that Africa, and especially the West Africa, is committed to take up the development challenges facing the region. Two of the five Heads of State who initiated the NEPAD are from West Africa: Presidents Obasanjo of Nigeria and Abdoulaye Wade from Senegal. Since its launch, this major initiative has registered the support of almost all African governments and was hailed by the international community. The NEPAD presents real opportunities for promoting sustainable development. First, its primary motivation is to address poverty and the economic and social backwardness of Africa. To achieve this, the NEPAD recommends the strengthening of political and economic governance and targets key sectors like infrastructure, health, education, agriculture and environment. Regarding the last sector, the NEPAD establishes a close relationship of interdependence between environmental health on one hand and poverty reduction and socio-economic development on the other.

Senegal, which is coordinating the NEPAD at the African level, considers IUCN as one of its key partners in conducting its mission. Thus, IUCN BRAO was invited by the Senegalese Minister of Environment to participate in the preparatory process of the NEPAD environmental plan of action.

Overall, challenges are many but the context, which is emerging in West Africa is highly favourable to the promotion of sustainable development that is conceived to integrate good governance, safeguard of nature in its essential function, and poverty reduction.