



## FINAL REPORT

**PROJECT:** Strengthening Resilience for Community Conservation of Biodiversity and wet ecosystems in Ouémé Valley

### Introduction

The degradation of the natural environment takes on a worrying scale which still persists today and one of the obvious consequences of which is the regression of biological diversity. Benin in general and its southern part in particular is not immune to this phenomenon of degradation. Wetlands, ecosystems endowed with important resources, are concentrated in the region of South Benin, which shelters more than 50% of the Beninese population. This situation justifies that the surrounding ecosystems undergo an anthropic pressure which does not guarantee the sustainability of the resources which compose them.



Given the density of the human population in the wetlands of South Benin and the high demand for meat from urban populations, the exploitation of natural resources is one of the main conservation constraints. Today, several aquatic species, in particular the mangrove and the African manatee (*Trichechus senegalensis*), are in decline in Benin and even more in the humid zones of the South of the country.

In addition, several studies report anthropogenic pressure on natural biological resources in general and many testimonies report increased hunting and significant massacres on the last populations of the West African manatee.

The pace of ecosystem degradation and poaching of the manatee population is far from satisfying the principle of sustainable use. It is with the aim of contributing to the rational management of these resources that the project "Strengthening Resilience for Community Conservation of Biodiversity and wet ecosystems in Ouémé Valley" is initiated with the support of Institute for Global Environmental Strategies (IGES) through Satoyama Development Mechanism (SDM), in order to alleviate the problems and help to meet the expectations of the convention on wetlands of international importance and the conservation of biodiversity.

## **Reminder of the problem dealt with by the project**

Ouémé valley, integral part of site Ramsar 1018, is subject to growing anthropogenic threats to wildlife and biological resources, while it is one of most important natural area in Benin and shelters for endangered Aquatic Genetic Resources. It is found that large populations of water species are found to be subservient to humid ecosystems of Ouémé valley, but this area has no protection beyond a few sacred wet forests which are also in constant degradation. Some indicator species as *Trichechus senegalensis* (VU), *Hippopotamus amphibus* (VU), *Aonyx capensis* (DD), *Lutra maculicollis* (VU), *Cercopithecus e. erythrogaster* (EN), *Kinixys homeana* (VU), *Tragelaphus spekei*, marine turtles and medicinal plants, etc. become scarcer and tend to disappear. This is, among other things, direct consequences of heavy pressure on ecosystems and abuse on resources (Wetlands International Africa, 2010). The state of poverty of populations, inadequate community education, inadequate enforcement of existing legislation coupled with a lack of technical monitoring justify risk of loss of essential elements of biodiversity in area, and this area plays an important socio-economic role in supplying bulk of national fisheries production and many other food resources in Benin and West Africa. Faced of this situation, sustainable management of resources is necessary for sustainable use of this wetland so that present generations derive maximum sustainable benefits while maintaining its capacity to meet needs and aspirations of future generations.

The project received financial support from Institute for Global Environmental Strategies (IGES) through Satoyama Development Mechanism (SDM), and material support from IDEA WILD.

## **Project objectives**

The objectives of the project are:

- Train 24 new eco-guards (men and women) and revitalize the 08 existing eco-guards so as to reassure oneself of their responsibility and increase their influence;
- Raise awareness and educate local communities on safeguard natural ecosystems and vulnerable and endangered aquatic fauna species, *Trichechus senegalensis* in particular;
- Restore 2ha of degraded wet forests to ensure natural conservation to slow the loss of biodiversity and sustain livelihoods.

## **Practical phase**

A total of five activities were carried out under this project:

### **1- Community dialogue workshop**

This workshop, dedicated to launching project activities, is the first phase of project implementation. It brought together all the local actors (local authorities and local communities (hunters, fishermen, traditional chiefs, members of local forest and wetland management organizations, officials of the Republican Police, experts, etc.) from villages of Avagbodi, Bembé, Gbojê, Hozin (Municipality of Aguégus) to discuss the state of degradation of Benin's wet ecosystems in general and that of the Ramsar 1018 site in particular.



During the discussions, several experts mentioned that the best conservation of biodiversity and of the African manatee in particular must take into account Man and his activities. The participating experts strongly recommend that AMAF-Benin develop a multi-annual conservation program that will integrate ecological activities in localities and in schools, in order to give a habit of community monitoring to women and children. Finally, they asked AMAF-Benin to initiate the development process of Grand Nokoué which will cover all the municipalities of the Ramsar Site 1018.

## 2- Training of eco-guards

This training encouraged and strengthened the capacities of 32 community actors as eco-guards, in the concept of environmental education and community monitoring of biodiversity. The latter are actors in terms of multiplying knowledge for other communities in the region.

This training, which lasted three days, resulted in four main modules:

- Introduction to the concept of environmental education: the forms of anarchic use and occupations of the mangrove in Benin ;
- Proposal for a new reaction to the conservation of mangrove ecosystems ;
- Mangrove restoration and management technique as gites and migration corridors for the African manatee ;
- Monitoring and reporting technique for mangrove destruction and capture of the African manatee, etc.



Given that conservation has today become a major concern insofar as wetlands play an important role in the balance of natural environments, the knowledge of the functioning of this particular ecosystem is necessary so as not to have to take action that could compromise the ecological and natural balance of these areas.

### 3- Reforestation of mangroves and other native species

The local communities were involved in replanting mangrove and other native species to mark their engagement to restoration of the degraded wet forests. The ecosystems specific to humid forests are enriched and valorized. A total of 1500 plant species have been reforested, including 600 mangroves (*Avicennia germinans*) and 900 other native species (*bambousa vulgaris*, *khaya senegalensis*, *ceiba pentandra*).



### 4- Information, Education and awareness of communities

Since local communities are considered to be the final targets of the project, brochures on environmental education have been produced and distributed to communities of Aguégué and beyond. Two plates (panels) were produced and installed in areas identified as migration corridors for the African manatee. Finally, three radio programs were produced and broadcast.



This initiative was appreciated by the communities and the authorities. Several testimonies indicated that the installation of the plaques in the area raised the awareness of several people in the community on the importance of saving the African manatee.

## **5- Project impact assessment and recommendations**

Several accounts confirm the growing presence of the African manatee in the area.

Among the proposals and recommendations made, there are:

- The gradual establishment and training of eco-guards in all the villages of the Municipalities of Lake Nokoué and the Ouémé Valley (Aguégués, Adjohoun, Dangbo, Sèmè-Podji, Sô-Ava);
- Production and distribution of education and community learning documents on biodiversity;
- Production and distribution of information and awareness documents on environmental conventions and laws in Benin, in particular conventions and laws on wetlands (Ramsar) and on trade in wildlife species (CITES);
- Gradual support for local communities in the implementation of alternative income-generating activities compatible with reducing the pressure on wet ecosystems;
- Training of fishermen's groups for legal and sustainable fishing;
- Reinforcement of cooperation between administrative and local authority and local communities;
- Provide the republican police and eco-guards with materials for effective monitoring of natural resources.

## **6- Conclusion**

AMAF-BENIN believes that the sustainable conservation of biodiversity must be based on educating communities to know their environment and to know the natural resources of their localities. AMAF-BENIN also believes that taking traditional knowledge into account and strengthening cooperation at the local level play an important role in conserving biodiversity and the environment. It is therefore crucial to promote traditional approaches and cooperation at the local level for effective and sustainable environmental governance. Thus, AMAF-BENIN intends to work to mobilize resources to concretize the aspirations and recommendations formulated by the communities, in order to contribute successfully, to the operationalization of the National Biodiversity Strategy and Action Plan (NBSAP).