

FINAL EVALUATION

SUPPORT PROJECT FOR WETLAND MANAGEMENT IN THE INNER NIGER DELTA

FINAL REPORT

(Translated from the French original by
the IUCN Regional Office for West Africa)

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SUMMARY

In February 2002, the final evaluation of the *Support Project for Wetland Management in the Inner Niger Delta* took place. The overall objective of the evaluation was to evaluate the environmental, socio-economic and institutional impacts of the project. Its specific objectives were to analyse the project's relevance, effectiveness, efficiency, impact and sustainability.

The evaluation team, composed of Meg Gawler, an ecologist and Bréhima Bérédogo, an anthropologist carried out the study by analysing documents, conducting interviews and inspections in the field, together with a comparison of the projected results with the final outcomes.

The review found that:

- As far as relevance is concerned, this project addresses the implementation of the international conventions signed by Mali (The Ramsar Convention and others). It is also in line with national environmental and rural development policies, and with the fight to alleviate poverty. It also meets local needs regarding the management of natural resources and the implementation of decentralization.
- In terms of effectiveness, the specific objectives were largely achieved: the development of local initiatives for the management of natural resources, the expansion of income-generating activities, building of capacity among local populations and technical services, the development of land management plans, etc. Partnerships were developed and the local populations were involved in the implementation of the project. However, the monitoring-evaluation during the implementation of the project was inadequate or absent altogether
- As regards efficiency, the project succeeded in accomplishing a lot with the means put at its disposal. However, there were problems with the circulation of funds, an underestimate of operational costs during the first two years of the project, and a poor allocation of this funds among budget lines.
- The impacts of the project can be observed in five areas: ecological, social, natural resource management, poverty alleviation, and unforeseen impacts. The flooded forests, which have positive effects for biodiversity have been restored. Natural resources are managed thanks to rules developed by and accepted by the local people. The project has contributed to poverty alleviation by creating village credit schemes, developing cattle breeding and vegetable gardening, improving fish processing methods, etc. The project has taken gender into account, and has established partnerships among the different components of society. Human lives have undoubtedly been saved through the settlement of conflicts among the users of natural resources, thanks to the local covenants that were developed.
- As far as sustainability is concerned, the activities initiated are very likely to continue, particularly because they were undertaken collectively by IUCN, the technical services and the local populations together. However, because of complaints expressed by some women, the continuation of vegetable gardening seems unlikely.

The strong points of the project were that IUCN was able to convince the local populations to appropriate the project, and it was able to reach as best it could the targets it had set for itself. The project's weak points concern: the technical quality of the management plans, the lack of translations on tapes in local languages, and inadequate collaboration with Wetlands International.

The project needs a little extra funding in order to translate the management plans and local covenants into Fulani, Songhay and Bozo; to develop maps for the management plans and agreements; to convene a workshop for the validation of the management plans and to make a formal request for the recognition of these planning instruments.

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- the national, regional and local staff of the Nature Conservation Department in Mali
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- the boatmen and the chauffeur of IUCN
- the populations of Youwarou, Akka and Dentaka, and
- all those who contributed to the execution of this evaluation.

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ACRONYMS AND ABBREVIATIONS

AAAC	Association for the support to community self promotion
APSLD	Association for the promotion and protection of Lake Débo
BRAO	IUCN Regional Office in West Africa
CARESTE	Use of capacities and technical and scientific networks as decision-making tools
CSLP	Interim strategic framework for poverty alleviation
DNCN	National Department for Nature Conservation
GEPIS	Group of experts on the Sahelian flooded plains
ILMP	Integrated Land Management Plan
LMC	Local Management Committee
MARP	Participatory Action Research
NEEMA	Association for the protection and promotion of Dentaka forest
NGO	Non Governmental Organization
PNAE	National Environmental Action Plan
PNUD	United Nations Development Programme
SAT	Land Development Plan
SLACAER	Local Service for Support and Consultancy and Rural Development
SCN	Nature Conservation Office
SNLP	National Strategy for Poverty Alleviation
IUCN	World Conservation Union

FINAL EVALUATION

SUPPORT PROJECT FOR WETLAND MANAGEMENT IN THE INNER NIGER DELTA

1. GOAL OF THE EVALUATION

In November 1998, the Netherlands Embassy in Bamako signed a three-year financing agreement with the IUCN office in Mali, for the Support Project for Wetland Management in the Inner Niger Delta. The financing agreement includes a provision for a final evaluation of the project at the end of the field activities. The general objective of the evaluation is to assess and describe the environmental, socio-economic and institutional impacts of the project.

IUCN undertakes evaluations for two main reasons:

- IUCN is accountable to its members, partners and donors for the good functioning of its projects. The process of an external evaluation is part of IUCN's commitment in favour of transparency and responsibility.
- An evaluation offers IUCN and its partners the opportunity to learn, in a creative manner, how to improve its work, and how to make projects and programmes more efficient.

The goal of the evaluation is to improve knowledge about best practices in conservation and development.

The specific objectives of the review were the following:

- **Relevance:** to determine the relevance of the activities of the project, in relation to the needs of Mali and of the beneficiaries with respect to conservation and sustainable use of biodiversity.
- **Effectiveness:** to assess the effectiveness of the project activities and their appropriateness in terms of the objectives of the project and the financing agreement.
- **Efficiency:** to estimate to what extent the project used its resources efficiently.
- **Impact:** to list, analyse and evaluate the results of the project and their impacts on the environment and the socio-economic situation of the beneficiaries.
- **Sustainability:** to identify specific areas and activities that may be built upon by the beneficiaries, actors and partners.

The terms of reference of the evaluation are attached in Appendix A.

2. METHODOLOGY

The methodology for gathering the necessary information and data for the evaluation included several steps:

- documentary research
- exchanges with the different authorities and technical services participating in the project (IUCN-Office in Mali, National department for nature conservation, the Netherlands Embassy, the Government High Commission, etc.)
- preparation of a methodological matrix for the evaluation (see Appendix B)
- deciding on a sample for the interviews
- development of the field methodology: a semi-structured interview protocol, adapted to the different components of the sample (Appendix C)
- field research: talks with the stakeholders and visit to the main realisations of the project.
- two debriefings - in Youwarou and in Bamako – in order to solicit the reactions of the people concerned by the evaluation to the initial findings of the review.
- analysis and synthesis of the data collected through the documentation and in the field

- preparation of the draft report
- incorporation of comments from the IUCN office in Mali and the Netherlands Embassy and preparing the final report.

The sample comprised IUCN staff, the staff of the Netherlands Embassy, national and international NGOs, the national Department for Nature Conservation, technical services in Mopti, regional technical services in the Youwarou Circle, and beneficiary populations at several levels. The field survey was carried out through interviews with the different elements of the sample, together with observations in the field of project interventions in the company of the beneficiaries.

The method suffered a lack of time to better analyse the documents and better observe the target groups in the field. It must be said that the evaluation mission was not organized in the best conditions. Despite agreement that the documents would be given to the two evaluators at least one week before the start of the mission, the team got the key documents only at the last minute. This resulted in the mission's not being sufficiently informed before going to the field, which somewhat jeopardised the preparation of the interviews. (This same problem had also been indicated during the evaluation of the DGIS/IUCN project "Reinforcing Institutional Capacities for Wetland Resource Management in West Africa" (Coulibaly et al. 1999).

In addition to the evaluation matrix and the interview protocol, the following documents are included in the appendices: Agenda of the mission, List of persons encountered, and List of the documents consulted (Appendices D, E, F respectively).

3. COMPOSITION OF THE EVALUATION TEAM

The evaluation team was composed of two outside experts: an international expert (Ms Meg Gawler), a specialist in wetland conservation and management, who has long experience in project evaluations (head of the team), and a national expert, an anthropologist (Dr Bréhima Bérédogo), who has a thorough knowledge of the socio-economic realities of Mali. He also brought experience in evaluation, project analysis, and in local capacity building with a view to sustainability. Both consultants have experience in gender issues. A short biography of each evaluator is presented in Appendix J.

4. CONTEXT

The Inner Niger Delta (Map 1) is flooded every year by the rise in the water level of River Niger and its main affluent, the Bani. Because of this, the delta is characterised by a high productivity of its soils, pastures and fisheries resources. The Delta is also used as a resting and nesting area for hundreds of thousands of birds: 350 species, including 118 migratory species (1999 annual project report), and it is one of the last habitats of the African manatee (*Trichechus senegalensis*)

In 1987, the Government of Mali ratified the Ramsar Convention by listing three sites, including the whole of Lake Walado Débo (103,100 ha; 15°15'N 004°15'W), where the project's activities have been carried out. Lake Walado Débo is in fact a widening of the Niger River, which expands and contracts with the water level. It is composed of stretches of open water and large herbaceous hydrophilic prairies, with a predominance of "bourgou" (*Echinochloa stagnina*), much appreciated as pasture.

The Delta contributes 84% of Mali's fish catches and 36% of the fish brought in at Mopti come from Youwarou (personal communication, Operation Fishing). Moreover, the delta receives a quarter of the country's livestock each year (personal communication, Mr Tiéro).

The climatic, ecological and socio-economic changes of the last decades have caused a dramatic change in the systems of natural resource use. Flows of the Niger and the Bani rivers have decreased from 80 cubic kilometres in the 1950s to 31 cubic kilometres in the 1980s (Diakité et al. 2000). Successive droughts have seriously jeopardized the natural equilibrium of the Delta (falling levels of ground water, depletion of spawning areas, extinction of fish species, deterioration of pastures). At the same time, the human population density in the area has increased substantially. Because of population growth and the consecutive droughts in the 1970s and 1980s, the traditional balance in the Inner Niger Delta among livestock, fishing and farming has seen profound changes and new threats.

The project operates in two districts – Déboye and Youwarou – and works with three of the 45 villages that belong to these two districts.

History of IUCN-Mali

IUCN began working in Mali, at Youwarou, in 1984. In its first phase (1984–1988), the project carried out inventories of natural resources, and research on the flora, fish resources, birds, and the impact of drought on the development of trees, etc. Relying on selected international and national criteria, this stage supported the Government in defining priority sites for listing in the Ramsar Convention.

The second phase (1990–1992) aimed at creating a Land Development Plan (SAT) as a tool for improving production systems. The activities of this second stage of the project were related to ecology, forestry, technical actions and Ramsar sites.

The third phase (1995–1999), named CARESTE ("Use of scientific and technical capacities and networks as decision-making tools") had above all set itself research targets.

The fourth phase (1999–2001) is the one under evaluation: *the Support Project for Wetland Management in the Inner Niger Delta*. In this report, the word "project" refers only to this fourth stage of IUCN's work in the Delta, carried out thanks to the financial support from the Netherlands Embassy.

5. PROJECT DESCRIPTION

The financing agreement signed in November 1998 made provisions for a financial contribution of 190 million CFA francs for a three-year period. The project document is an integral part of the financing agreement. This project, begun *de facto* in April 1999, aimed at enhancing the achievements of the previous projects and at quickly implementing participatory management activities.

In its conception, the project seeks to reconcile conservation with natural resource management by strongly involving the local communities concerned, so as to create ecological and socio-economic conditions favourable to local development. The foundation of the project is the development and implementation of site management plans. Surveys carried out at the sites revealed constraints, potentials, proposals and possibilities for resource development.

Objectives

The general objective of the project is to finalize and to implement the management plans of the Akka-Goun and Dentaka sites located in the Circle of Youwarou. In view of this, three specific objectives were defined in the project document:

1. Develop local initiatives in the conservation of local resources.
2. Build capacity in the local populations, technical services and NGOs in the techniques of conservation and exploitation of fisheries, plant and animal resources.
3. Help local institutions to set up legal measures and mechanisms necessary for implementing the principles of local management of natural resources.

Beneficiaries and partners

The local population is mainly composed of Fulani, Bozo, Somono and Songhay and secondarily of Bambara, Marka and Arabs. Their economic activities are raising livestock, fishing, farming, trade, and crafts. The Circle of Youwarou is very isolated, and poor in infrastructure and community facilities.

6. RELEVANCE

The project falls within the scope of the international conventions signed by Mali, including the Convention on Biodiversity and the Ramsar Convention on Wetlands. The project works in one of the three Ramsar sites in Mali and supports the government to implement and to fulfil requirements linked to the ratification of the Ramsar Convention. However, considering that the contracting parties commit themselves to finalizing zoning and to developing management plans for each site listed in the Ramsar Convention, and considering that the project is limited only to local initiatives in Youwarou, one can conclude that it has made only a first step towards a zoning and management plan for a part of the Walado Débo site.

At the national level, it contributes towards the implementation of different national development policies, including those relative to the « National Plan of Environmental Action » (PNAE) and to poverty reduction. With regard to the PNAE and the rural development policy, the project has implemented Mali's « Pastoral Charter » by controlling local livestock raising through the development of the different local covenants. It was also an opportunity for the local population to learn about and enforce Law 95-32, which governs the relationships between Malians and their natural resources.

In Mali, 70% of the population live beneath poverty level, that is to say with less than 103,130 CFA francs a year (Government of Mali, 2000). Poverty reduction has become an explicit objective for the Malian government since 1995. With this perspective, Mali developed a National Strategy for Poverty Reduction. The eight axes of this strategy, and its iterative process and sectoral strategies will be serve as the background for the elaboration of a temporary Strategic Framework for Poverty Reduction, and then for the definitive Strategic Framework that is currently being developed.

In accordance with the national policy of poverty reduction, the project addressed local poultry farming through poultry vaccinations, beekeeping, market gardening, the creation of women's associations' savings and loan banks, the development of natural resources by the improvement of fish conservation methods, the improvement of pastures, etc. The regeneration of the Akka-Goun and Dentakka flooded forests has enabled the population to have wood and non-wood forest resources and to improve fish production. Here the relation between nature conservation and meeting the socio-economic needs of the local populations can be perceived. It is interesting to note that in the course

of the evaluation, the local populations themselves mentioned that the regeneration of the forests enabled birds to come back and to use the forest as a resting and nesting zone, and to supply a source of food for fish with their faeces. As a consequence, fish resources multiplied, to the great satisfaction of the fishermen and the local populations, whose diet improved and whose income increased.

At the local level, the project meets the needs of the populations, and it is the only project still in progress in the whole Circle of Youwarou. By aiming at good natural resource management, the project has contributed to the sustainable development of Youwarou.

The central Delta of the Niger is also an area of conflicts. It is characterised by an irregular climate, which leads to irregular availability of natural resources. The sociological dynamics that result from this is competition for land, based on inequitable access to natural resources. Land dynamics combine pre-colonial, colonial and postcolonial regulations. Thus, the potential for conflict is very high because of the progressive diminution in available resources, together with worsening climatic and high pressures on the resources as a result of demographic increase. By setting up legal measures and the necessary mechanisms for implementing the principles of local resource management (local covenants), the project seems to have found solutions for settling these sometimes bloody conflicts.

Moreover, the project is consistent with the local needs of the decentralization policy. It has contributed to the implementation of decentralization through the development of management plans and local covenants, and by training of local officials. It supported them during the organization of a forum to elaborate a development programme. It has also participated in the development of the three-year plan and the annual development programme of the Council of the Circle.

The project is so relevant that at the level of the Circle, it is difficult to make a difference between the monitoring committee of the project and the Local Committee for the Development of the Circle.

7. ANALYSIS OF THE PROJECT DESIGN

IUCN learned lessons from the preceding stages that no doubt had suffered from overly high funding. The current stage is based on the principle "*Small is beautiful*" which was welcomed by the local populations. The strongest point in the design of this phase was targeting the real priorities of the people and looking for solutions in traditional knowledge. Moreover, the project reinforced the authority of the local people by creating a local monitoring committee for the project.

Although the heart of the project is well targeted, some important gaps remain in its design, for example:

- The lack of research to determine the carrying capacity of the ecosystems in relation to the use of natural resources and population growth (3.1 % per year in Mali). Without this, the project lacks a scientific basis for planning the future of the sites.
- The lack of ecological and socio-economic monitoring to assess the impact of the project and the effects of natural resource management.
- The lack of systematic internal monitoring procedures for the project.
- The lack of training for local people in ecological monitoring in relation to their needs in natural resources. This was a lost opportunity for the local populations to assume more responsibility.

- Insufficient human resources allocated to the project: the project document does not provide for sufficient support to the coordinator in terms of administration and community outreach.
- Insufficient supervision of and support to the project in Bamako.

The project has the advantage of having a logical framework (Appendix G), but it lacks rigour: the results are not linked to the specific objectives and the activities are not linked to the results. In addition, most of the indicators have not been well thought out, particularly qualitatively.

8. EFFECTIVENESS

Management Plans

The overall objective of the project is to finalize and implement the management plans of the Akka-Goun and Dentaka sites situated in the Youwarou Circle.

It was at the beginning of the evaluation mission that the Integrated Land Management Plans (ILMP) were finalized. They are available in French, but have not been translated into local languages (Fulani, Songhay and Bozo). The management plans are not quite yet operational since there are no administrative or legal acts that would make them official; neither is there any financing. Nevertheless, they function informally.

These ILMPs are not management plans in the classical sense of the word. They are actually three-year project documents developed by the communities with the support of IUCN. They comprise a description of the physical, biological, human, and socio-economic setting, and an inventory of management problems. However, the following aspects are nowhere developed in the management plans: an evaluation of the main characteristics of the site, the factors influencing the long-term achievement of the objectives, the zoning of the sites (with a map), the management plan, the recommended management methods and rules.

The guidelines for the management plans of Ramsar sites are summarized in Box 1.

ILMPs aim at the socio-economic development of the area through the sustainable use of natural resources. They are presented in the form of logical frameworks with five specific objectives. For each objective, the logical frameworks specify the activities to be carried out, their outputs, the time frame, as well as the financial resources required. The budget for the ILMP of Youwarou-Akka amounts to FCFA 204,025,000 and that of Dentaka to FCFA 176,985,000. Neither the beneficiaries' participation in kind, nor the communities' or state authorities' participation are specified in the budget. The financing from development partners in is not yet secured.

It is expected that the management rules for the sites will be developed in the local management conventions. A short summary of the functioning of the Youwarou-Akka management plan is given in Box 2.

The development of the management plans is the fruit of a long process of surveys, research, capacity building, and support to local initiatives. This process of involving local people has undoubtedly been as important as the final result. Through these management plans, the local populations and the authorities have a tool for negotiations and planning their own activities, built upon common priorities and objectives.

Box 1.

SUMMARY GUIDELINES FOR MANAGEMENT PLANS OF RAMSAR SITES

(Source: Ramsar Convention Bureau 2000b)

The process of developing management plans provides the framework and the agreement between the different parties involved, required for the conservation of biological diversity and the productivity of the site; it enables the long-term wise use of these resources by people.

The management plan comprises five main parts:

1. Preamble

A concise policy statement which reflects in broad terms the policies of supranational, national or local authorities and that recalls the three broad Ramsar obligations:

- maintaining the ecological characteristics of listed sites
- making wise use of all wetlands, and
- establishing nature reserves at wetlands.

2. Description

A basic description of the site will form a baseline for monitoring programmes which should identify any subsequent changes at the site.

3. Evaluation

An evaluation of the major features of the site, based for example on:

- size and position in ecological unit
- biological diversity
- naturalness
- rarity of species, communities, habitats, or landscape features
- fragility: natural or human-induced
- typicalness (best examples of a particular habitat)
- archaeological or paleo-environmental history
- potential for improvement
- aesthetic, cultural and religious value
- social and economic value
- potential for environmental education
- recreation
- research / study.

4. Objectives

- Long term objectives – a concise expression of intention derived from the evaluation process
- Factors influencing achievement of long-term management objectives, for example:
 - internal natural factors (natural succession for example)
 - internal human-induced factors (invasion alien species, pollution, etc.)
 - external natural factors (climatic change, etc.)
 - external human-induced factors (diversion of water supply, sedimentation, etc.)
 - factors arising from legislation or tradition (local laws, etc)
 - physical considerations, such as inaccessibility
 - available resources for management tasks
 - summary of factors influencing achievement of long-term objectives.

5. Action Plan

For complex sites, an overall umbrella plan should be established in collaboration with all users. A zoning process may be appropriate to regulate actions in different parts of the area. Management options include: habitat management, species management, useage, access, education/communication, and research. Action plans are detailed for each project, and work plans are revised every year.

Box 2.

INTEGRATED MANAGEMENT PLAN OF THE YOUWAROU-AKKA LAND

The integrated management plan of the Youwarou-Akka territory makes official the Local Management Committee (LMC) and specifies its composition, attributions, sub-committees and functioning. Aside from resource persons, the LMC is composed of farmers, breeders, fishers, women's organisations and youth movements (each having three representatives), Local Council, the Committee for Youwarou-Akka Local Development, and technical services (having only one representative), and the village chief. The LMC elects its executive bureau, and is divided into three sub-committees: 1) the forest, fishing and beekeeping committee, 2) the agriculture and livestock committee, 3) the infrastructure, trade, craft and tourism committee. The LMC holds an annual general assembly, and the committee meets every quarter. The LMC is responsible for:

- contributing towards the annual planning for implementing the management plan
- identifying possible bottlenecks and suggesting solutions
- helping to coordinate the actions of different parties
- acting as an intermediary between the local populations, partners, and local authorities for anything concerning the management plan
- coordinating the activities of the sub-committees under its supervision.

The forest, fishing and beekeeping sub-committee is responsible for:

- the regeneration of *bourgou* and other species, in cooperation with the agriculture and livestock subcommittee
- monitoring of the flooded forest, particularly the fauna and flora
- the supervision of reforestation and the fight against brush fires
- monitoring the enforcement of the texts and conventions regulating the use of resources.

The main role of the agriculture and livestock subcommittee is to control the agricultural area and the access to *bourgou* fields, and to settle possible conflicts between farmers and pastoralists.

The infrastructure, trade, craft and tourism sub-committee follows the promotion and achievement of the activities foreseen in the management plan, and the mobilization of local populations for this work.

The ILMP provides for an annual meeting between the LMC and the Committee for the Development of the Circle, which is the official coordinating body for activities at the scale of the Circle of Youwarou.

Local Initiatives

The first specific objective of the project is to develop local initiatives for the conservation and sustainable use of natural resources. These initiatives concerned:

- the regeneration of *bourgou* (230 ha regenerated)
- the destruction of *Mimosa pigra*, an invasive plant in the *bourgou* fields (on 450 ha)
- "Chorkor" ovens, which process more fish, more rapidly, and with better quality, while using less wood.
- the surveillance of the Dentaka and Akka-Goun forests.

As the project did carry out ecological or socio-economic monitoring, it was not possible for the evaluation mission to quantify the percentage of restored areas, nor the percentage of the population that benefited from local initiatives.

Capacity Building

The second specific objective of the project is to build capacity in the local populations, the technical services and NGOs in the techniques of conservation and use of fish, plant and animal resources.

With the local populations, the project targeted capacity building through:

- awareness raising and mobilization of people through debates, and radio and TV broadcasts on international and local covenants and on the management plan, etc.
- environmental education – through the activities of the NGO “Walia”
- training in:
 - the development of management plans and local covenants
 - the management and regeneration of *bourgou*
 - forest management
 - the management of credit and savings for women
 - the processing of fish with Chorkor ovens
 - vegetable gardening, beekeeping, poultry raising, and cereal processing.

IUCN supported the technical services, first in their contacts with rural populations. The project started at the same time as when the Forestry Directorate (Direction des Eaux et Forêts) became the Nature Conservation Service (Service de la conservation de la Nature). This government department was often poorly viewed because of its former mandate of repression; it was motivated to change that perception, and IUCN supported it to do so. The government officers benefited from institutional support, and received training in the socio-economic aspects of wetlands in West Africa, micro-credit, managing *bourgou* fields, etc.

NGOs are not very developed in Youwarou, but the Association for the Promotion and Protection of Lake Débo and the Association for Support to Community Self-promotion benefited from the training by IUCN, particularly in land management.

A study trip to Senegal and Mauritania organized for 23 persons in order to exchange knowledge about issues of management of natural resources in wetlands included local councillors, community members (including women), technical services and NGOs.

Local Conventions

The third specific objective of the project is to support local institutions to put in place legal arrangements and mechanisms essential for implementing the principles of local management of natural resources.

The local convention is a consensual deed involving all the actors in a given place. In Mali, Law 95-32 gives importance to local covenants and endows them with indisputable legitimacy. The purpose of local covenants is to avoid and solve conflicts. The project helped the populations set up four such covenants:

- Rules for the management of Youwarou fisheries (February 2001)
- Local convention for the management of the forest at Akka-Goun (June 2001).
- Local convention for the management of the forest at Dentaka (June 2001).
- Rules for the management of the *bourgou* fields of Débaré and Akka-Goun (September 2001).

Box 3.

LOCAL CONVENTION FOR THE MANAGEMENT OF THE DENTAKA FOREST

The Dentaka forest is located on the left bank of the Walabo Debo between the village of Diankakore and the fishing camp of Dentaka. It covers an area of 308 ha and constitutes an exceptional habitat for water birds. The convention evolved from workshop dialogues involving local populations living at the outskirts of the forest, the supporting structure (IUCN), the administrative and technical services, the elected representatives, and the civil society. The subjects debated were the status of the forest, structures for managing the forest, the status of forest and faunal resources and their evolution, threats to the forest, and the concrete measures to be taken for the sustainable management of the forest. The aim of the convention is to contribute to the restoration of the calm necessary for the nesting and rest of water birds in the forest.

The participatory approach developed by IUCN and the technical services in 1986 led to the creation of the management committee of the Dentaka forest in 1989 - a committee composed of men and women. The activities for the restoration and conservation of the resources in Dentaka with the involvement of local populations were based on:

- the regeneration of the forest, mainly *Acacia kirkii*
- the organisation of grazing
- the protection of forest and faunal resources
- providing information, raising awareness, and training of local people in the restoration of natural resources.

The Association for the Protection and Promotion of the Dentaka Forest (NEEMA) was created in January 2001. It aims at restoring and conserving the Dentaka forest and at using the resources in a wise and sustainable manner. The bodies of the Association comprise: the general assembly, the board of directors (the executive arm of the decisions made by the general assembly), and the surveillance committee which is the body of the Association responsible for field monitoring. There is a surveillance brigade. An internal monitoring structure was also created to ensure the correct implementation of the Convention.

The Convention complies with laws in force in the Republic of Mali. Bans include:

- the exploitation, transportation and trade of forest timber
- forest clearing without permission
- brush fires
- hunting birds
- unauthorised presence of animals
- unauthorised visits

Acacia kirkii, the dominant tree in the forest, and which is endemic in the Niger Delta, remains fully protected.

The period and the conditions of access to the grazing resources in the forest, as well as the number of the livestock, are determined and communicated by the Association every year.

Actually, local covenants were implemented as oral agreements prior to IUCN's arrival. IUCN helped specify, improve and formalize what already existed, based on traditional knowledge and customs for the management of natural resources.

For example, fishermen know that certain fishing gear are forbidden in a given area: there are also no go areas for certain months of the year. However, as mentioned earlier (chapter 6), the exploitation of national resources was not without violent conflicts. The covenants provide for a basis for native and outside fishers to work together, which enables them to avoid or mitigate conflicts.

For pastoralists, the convention is based on "*harima*", a defined reserve area that belongs to the village. According to local tradition, each village has the right to possess its *harima* and outsiders pay for the privilege of letting their livestock graze there.

Box 3 presents, as an example, a description of the local convention for the management of the Dentaka forest.

Self-evaluation made by the coordinator of the project

In Appendix H, the coordinator of the project has noted the achievements of the project as well as problems encountered, in relation to the original logical framework.

9. EFFICIENCY

The analysis of efficiency looks at the relationship between the use of resources and the results - that is to say, the impact of the project in relation to its cost. Generally speaking, the project succeeded in doing a lot with the means at its disposal. Nevertheless, it could not use its budget in a totally effective way. Over the three years, the project spent 71%, 55% and 88% respectively of its annual budget.

In 1999, the delays in the activities (as indicated by underspent budget lines) concerned:

- inter-village exchange visits
- the dialogue meeting of the community committee
- the management plan for the second site
- the restoration of degraded grazing lands
- the fight against *Mimosa pigra*
- the development of channels for the harvest of birds
- the improvement of preserving fish.

On the other hand, there was more effort than expected in training for the development of management plans, in the regeneration of *bourgou*, and in beekeeping and poultry farming.

In 2000, there were delays in:

- the training of community councillors in management and participatory approaches
- the studies of local structures
- the regeneration of *bourgou*
- market gardening and
- as in the preceding year:
 - the management plan for the second site
 - the restoration of damaged grazing areas
 - the fight against *Mimosa pigra*
 - the development of channels for the harvest of birds

- the improvement of preserving fish.

For the first two years of the project, operational costs (fuel, maintenance, communications) were under-estimated. Operational costs did not take into account the logistics required for the remote access of the project area.

For the year 2001, the budget was revised to better fit the real needs of the project.

The project did not have too much money, but it was not well distributed among the budget lines. There were sometimes serious problems in the transfer of funds, either by the Embassy to the IUCN office, or by the IUCN office to the Project Coordinator. The project could have done more if it had had:

- a system of adaptive management, including more flexibility in the distribution of funds among budget lines
- better administrative support from the IUCN offices in Bamako and Ouagadougou.

10. PROJECT MONITORING SYSTEM

As already mentioned in the chapter on project design, there were serious deficiencies in the ecological and socio-economic monitoring, which prevented evaluating the impact of the project. It is unfortunate that local people did not have training in ecological monitoring in relation with their natural resources needs.

Moreover, there was an institutional breakdown in the IUCN-Mali office, which resulted in closing the office for ten months. The Coordinator was effectively alone until September 2001. Apart from the six-monthly and annual reports, there was no systematic mechanism for monitoring the project.

However, a very relevant innovation took place in this phase: IUCN signed a protocol with the Local Monitoring Committee, which enabled the LMC to monitor all the activities of the project related to rural development. This strategy increased the authority of the local populations, the technical services and NGOs, and enhanced their involvement in the project.

11. PARTNERSHIPS

IUCN was generally able to establish a good collaboration with the great majority of its partners, for example: the Nature Conservation Department at national and regional levels; the Council of Youwarou Circle, local officials and regional authorities; "Operation Fishing" and the fisheries department; and a few local NGOs. IUCN facilitated good collaborations by signing written protocols with most of its partners.

Two collaborations seemed to work less well: the cooperation with Wetlands International and with the Nature Conservation Service at Youwarou.

12. INVOLVEMENT OF LOCAL POPULATIONS

Since the priority actions of the project targeted the local people's priorities, it is not surprising to note a strong involvement of local people in all the aspects of the project.

The project focused particularly on women's involvement and development, through: their involvement in community structures and in motoring committees; training; Chorkor ovens and fish sheds (which address women's work); credit and savings banks; and market gardens. Nine women's associations were sponsored by the project, but even more wished to be supported.

In addition to interviews, we used the list of indicators established by the Parties to the Ramsar Convention to assess the extent of local populations' involvement in Wetlands management (Ramsar Convention Bureau 2000a).

Table 1.		
INDICATORS TO MEASURE THE INVOLVEMENT OF LOCAL POPULATIONS		
(Source: Ramsar Convention Bureau 2000a)		
No.	Indicator	Project
<i>Incentives</i>		
1	Local and indigenous people have achieved an economic stake or other interest in the wise use of wetland resources.	✓
2	The government agency has stated policies supporting participatory management.	✓
3	Appropriate legal and financial incentives for participatory management are in place.	✓
4	A more equitable sharing of benefits among stakeholders has resulted from the participatory management process.	✓
5	Stakeholders have expressed satisfaction with their involvement in the process.	✓ ✓
<i>Trust</i>		
6	There is a clear stated and widely known policy or legal document that makes a commitment to involving local and indigenous people.	✓
7	All key stakeholders (particularly government) acknowledge participatory management as legitimate and desirable.	✓
8	Local and indigenous populations are now involved in making substantive decisions affecting the wetland resource use and management.	✓
9	Local organisations to advance participatory management are respected within the community.	✓
10	Representatives of the local and indigenous people are truly representative and are accountable to them.	✓
11	There are resource use and participation rules which are appropriate to the local situation.	✓
12	A management agreement exists between stakeholders (oral or written, formal or informal).	✓
13	The management agreement has clearly defined boundaries and membership.	✗
14	The management agreement specifically defines stakeholders' functions, rights and responsibilities.	✓
15	The management agreement has been approved by at least the resource-using stakeholders and key decision-making groups.	✓
16	Parties to the agreement meet their commitments.	Too early to know
17	Non-compliance with approaches, rules, rights and responsibilities outlined in the management agreement is deemed to be at an acceptable level.	✓
18	Any system of graduated sanctions for infringement of rules has been agreed upon by all key parties.	✓

19	There is evidence that resource management controls are being implemented.	✓
Flexibility		
20	There is the potential for collective modification of the rules relating to resource use by those affected.	✓
21	There are "nested" management units (different bodies at different levels).	✓
22	There is evidence that the local and indigenous people can influence the speed and direction of change in relation to the resources with which they are concerned.	✓
23	Facilitators/coordinators practice "learning by doing" and adaptive management.	✓
Knowledge Exchange and Capacity Building		
24	There is an awareness among stakeholders of new management approaches, rules, rights and responsibilities.	✓
25	There is a two-way flow of information and communication between local and indigenous people and relevant government agencies.	✓
26	Information reaches local and indigenous people in a timely and accurate manner, and in a form which is readily understandable.	✓
27	Local and indigenous people participate in site monitoring and in evaluation of the participatory process.	✓
28	There is evidence of respect by key government agencies for local human systems and local ecological knowledge.	✓
29	Stakeholders are demonstrating necessary skills and empowerment (e.g., capacity to make decisions, monitoring skills, etc.).	Yes for the decisions, no for the monitoring
30	Measurement methods established by the stakeholders demonstrate and quantify the degree to which local participation was intended to, and actually has improved or conserved the recognized "functions and values" of the wetland and its wise use.	✗
Continuity		
31	There are one or more organisational structures that facilitate local and indigenous people's involvement (e.g., a council, management body, women's group, etc.)	✓
32	A random sample of local and indigenous people is able to identify the community's role in wetland management, and the individuals who are directly involved can accurately describe the objective of local and indigenous people's involvement.	✗
33	The governmental agency and its staff have a demonstrated commitment to participatory management, and can accurately describe the objective of local and indigenous people's involvement.	✓
34	There is an appropriately long-term source of funding for ongoing participation and resource management.	✗
35	Local and indigenous people have provided in-kind support (time, labour, traditional knowledge and expertise) to implement the participatory management agreement.	✓
36	Conflict management mechanisms exist, and there is an appeals process in case of conflicts within the management partnership.	Allowed but poorly viewed
37	There is integration between local wetland management and management of the entire catchment.	✗

As shown in Table 1, the great majority of these indicators are positive with respect to the project. Weak points concern:

- clear geographical limits in management agreements
- the lack of monitoring and evaluation systems
- a source of long-term financing
- the relationship between the wetlands and their watershed.

The timeframe for this evaluation did not enable a real survey among the local populations. Nevertheless, the evaluation questioned some inhabitants at random: no one knew about the project or the stakes of sustainable management. The sample was much too limited to draw any conclusions.

It can be said that the populations with whom the project worked are highly involved and even enthusiastic, but we do not know what part of the overall population was involved in the project and benefited from it.

13. IMPACTS

This fourth phase of IUCN's activities in the Delta is a consolidation phase, and the Local Monitoring Committee considers it as the most important years of IUCN's entire intervention.

Ecological impact

In analysing ecological impacts, it is important to keep in mind that the strongest impact on the health of the ecosystem, natural resources and economy of Youwarou is simply the amount and distribution of rainwater and river floods. The impact of any project is of very secondary importance compared with the rain and hydrological conditions.

The most important ecological impacts concern the flooded forests, dominated by *Acacia kirkii*, a tree endemic to the Niger Delta. According to Beintema et al. (2001), the number of forests in the Delta with significant mixed colonies of birds have seriously decreased over the last fifty years, with:

- ⇒ > 20 forests in the 1950s
- ⇒ 8 in the 1980s
- ⇒ 2 today.

The two forests still intact are those where IUCN has been active since 1984. The Union has worked with local people to plant *Acacia kirkii* again. The local populations have developed local management covenants for the Akka-Goun and Dentaka forests, and a local monitoring system has been set up. Neighbouring communities are motivated to protect their forests because with large populations of water birds, they have noticed an increase in primary and secondary production thanks to fertilisation from bird faeces, with the direct effects on pasture and fish resources.

The villagers say that after the drought in the 1980s, the Akka-Goun forest was seriously degraded; the area was bare, and the inhabitants of Youwarou could see the village of Akka through Akka-Goun Island. Today, Akka is hidden behind the regenerated forest. The good health of the forest led to the renewal of fishing, which had nearly been abandoned around Akka-Goun.

Nevertheless, the protection of the Dentaka forest faces a number of problems. According to one respondent, some ill-intentioned people, particularly local people, gather eggs and hunt water birds in spite of the ban. Moreover, young birds are unintentionally caught in fishing nets. To solve the problem of hunting birds, the following will be necessary: increased awareness of the populations, food security and an enforced system of monitoring by local men and women eco-wardens.

Moreover, the fate of the manatee in the Delta is far from secure. The manatee is totally protected by law. However, when fishers (who are perfectly aware of the law) accidentally catch a manatee in their

nets, they generally do not release it. A recent survey estimates that there remain only some fifty manatees in this Ramsar site. We fear that Mali might be gradually losing its last population of this threatened species.

Impacts on natural resource management

The local covenants are very important accomplishments that have gained strong acceptance among the local populations. The project has undoubtedly improved the management of natural resources in the areas where it has worked, for example in:

- the improvement of fishing
- the regeneration of *bourgou* fields and the improvement of pastures
- a reduction of approximate 50% in the consumption of the wood used to smoke fish thanks to the Chorkor ovens.

In Débaré, the management of *bourgou* fields failed in 2001, and there remains hardly any *bourgou*. This experience was a good lesson, and those raising livestock are now determined to ensure that the agreed dates for livestock to enter and leave the *bourgou* fields are respected.

Impacts on poverty reduction

We were not able to quantify the number of the people who benefited from an improvement of their living conditions thanks to the project. However, the people we met did point out:

- an improvement in food security
- an improvement in nutrition (more vegetables thanks to market gardening)
- positive developments in raising livestock thanks to the regeneration of *bourgou* and poultry vaccination; people have milk systematically, births of young animals, and poultry, which was not the case prior to the project
- small businesses and other women's projects have been made possible by the credit and savings banks.

Social impacts

One of the most important impacts of the project is the empowerment of local populations, which was not the case beforehand, through the formalization of the management plans, and particularly through the local management covenants. Local populations did have their management regulations, but prior to the project, no one respected them. The project has provided a new boost to local structures, and given them more authority.

By targeting capacity building among women, the project has also enabled changes in the composition of local structures so as to include women for the first time.

The Delta has always been an area of conflict. The rules and regulations established in the local covenants allow people to access natural resources without conflicts, or to settle conflicts if they should arise. Local people recognise that they can at last fish, raise livestock and farm peacefully, by respecting the rules. Some traditional rivalries (for instance between the villages of Homboloré and Ouro) have faded, and have lost some of their negative impact on natural resource management. The management rules diminish tensions among the different users of the natural resources.

Unforeseen impacts

Local authorities consider that the project has saved human lives, on the one hand by reducing conflicts among natural resources users, and on the other hand by regenerating the flooded forests that are used by pirogues for refuge during storms.

14. SUSTAINABILITY

The evaluation mission has doubts about the sustainability of vegetable gardening. We heard many positive remarks, but also some complaints about the difficulty of the work. What is more disturbing, is that we noticed the absence of young women working in the gardens, and we have the impression that only a small proportion of women (out of the whole population in the areas of the project) are involved in vegetable gardening.

The sustainability forecast for most of the project activities is generally good. The following can be cited as examples of outputs and accomplishments favouring sustainability:

- organisational structures for local people
- the management plans and local covenants – what is written represent a consensus among the users
- management committees are operational, and conservation activities by local people have begun
- awareness of the importance of environment – people seem to have understood the relationship between nature and natural resources, and are determined to take good care of them
- the mastery by local people of notions and concepts that were formerly unfamiliar to them, for example Law 95-32
- training
- the regeneration of *bourgou* with a self-financing system– the entrance fees for each head of livestock pay for the stalks and seeds necessary for the regeneration
- women's credit banks: for example in Youwarou, the bank started with a capital of 500,000 CFA francs that the women raised themselves; this capital now amounts to 2 million CFA francs and there is no problem with the repayment of loans
- Chorkor ovens are used enthusiastically; other fishers who were not targeted by the project have also built these ovens themselves after buying the grills.

In conservation and development projects, sustainability takes root when activities are based on the people's priorities, on appropriate technology, and on traditional knowledge.

15. MULTIPLIER EFFECTS

Multiplier effects are the signs of good project design and the sustainability of the project's activities. For this IUCN project, the following multiplier effects can be noted:

- The Head of the Fisheries Department noted that Chorkor ovens have garnered great interest, and the technical services are now overwhelmed with demand for them.
- Following the example of Youwarou, the first community to set up fishing and grazing rules and regulations, other communities have expressed their desire to create their own management rules.

- Likewise, the Land Management Plans of the Youwarou-Akka and Dentaka villages are considered to be formidable tools. The government of Youwarou believes that its own management plan offers a basis for a management plan of the entire commune comprising 24 villages.
- IUCN gave the Nature Conservation Service the opportunity to show the populations a different face from the former repressive style, and the NGO CARE KORO has done the same.

16. LESSONS LEARNED

- One of the conditions for the success of co-management systems (Gawler 2002) is the importance of confidence between the communities and the technical services. The project anticipated this, and has made every effort to change a situation of distrust into one of confidence.
- Traditional management systems are often the most relevant. In this project, “no go” areas, the forbidden fishing gears, and the management rules generally originate from the users and not from technical services; the rules and regulations are built upon tradition.
- With respect to the micro-credits scheme, the reason why the repayment of loans is close to 100% is undoubtedly due to the fact that the initial capital comes entirely from the women themselves. If one of them is late in paying, her fellow members go to her house and request the repayment.
- It is important to note that the participatory approach does not automatically lead to a management plan in the classical sense of the word.
- Finally, we wish to emphasize the importance of the human qualities in a project coordinator. The personality of Mr Tiéro, the coordinator, was a key factor in the achievement of the objectives of the project. He is to be thanked for the social cohesion he has been able to create in this area of conflict.

17. CONCLUSIONS

To conclude, we summarize the strong and weak points of the project, as brought to light by the present evaluation.

Strong points

- The Delta is a Ramsar site and an area of strong economic demand as well: IUCN has sought to reconcile conservation and development.
- The most important success of the project is the strengthening of social cohesion – it has enabled different groups, whose relations were marked by conflict and mistrust, to understand one another and to find common solutions to their problems. The project helped with conflict resolution, and has reinforced this by the development of written agreements.
- Priority actions target people’s concerns.

- The project has set up a solid basis for good management of natural resources by the local people, without outside support.
- The most important accomplishments are the Local covenants that complete the laws. The covenants established with the project's support are good patterns for other covenants.
- Local people now understand the meaning of biodiversity and of Mali's obligations with respect to the Convention on Biological Diversity and the Ramsar Convention.
- Awareness-raising through the media was done in local languages: Songhay, Fulani, and Bozo.
- The approach used by the Project Coordinator was successful in mobilizing the entire population targeted by the project.
- Representatives of the government services always accompanied the meetings.
- Training has strengthened the decentralized structures.
- The project limited itself to the role of a facilitator, while making key actors the local people and the technical services.
- IUCN was able to learn lessons from the past and from its work in the Delta.
- The people who have worked with the project are enthusiastic.

Most respondents were very positive about the project, and some of their direct quotations are included in Appendix I.

Weak points

- The project is too limited geographically. It is not sufficiently far-reaching in light of the ecological and socio-economic stakes. Neither the project nor IUCN-Mali seem to have lobbied in order to influence national and regional policies that could have strengthened the basis upon which the project is based. The main threats for the future of Lake Walado Débo and for the Inner Delta in general are external human-induced factors, namely:
 1. water diversion by dams upstream
 2. water releases from upstream dams, which can seriously perturb the entire ecological functioning of the lake
 3. agricultural pollution.
- The Land Management Plans do not have precise geographic limits. They should, at a minimum, include a land development planning map, developed together with the local people. The ILMPs have not been translated into local languages.
- The project lacks a research element that could have established the carrying capacities of the ecosystems in relationship with their use and the rapid population growth. Without such research, the project has no scientific basis for its actions, particularly regarding the long-term management of natural resources.
- The project document made provision for a process of ecological and socio-economic monitoring, nor for training local people in natural resource monitoring. This is one of the best methods to increase people's sense of responsibility and to give them tools for a more

systematic assessment of the effects of their management of natural resources (Gawler 2002).

- Many respondents complained that the Coordinator was not present enough. He was sometimes in Youwarou, and sometimes in Sévaré or in Bamako, whereas IUCN needed more field presence.
- In its design, the project team was too small; the presence of an administrator and a woman extension worker at Youwarou would have been beneficial.
- The collaboration with the technical services at Youwarou could have been better.
- IUCN experienced an institutional deficit, with the prolonged gap in the Bamako office. Generally, the administrative support to the project was insufficient, and the flow of funds suffered, sometimes with negative consequences in the field.

18. PROJECT FOLLOW-UP

Follow-up proposed for the current project

It would be desirable to keep the project going on until June 30, 2002 in order to:

- develop maps for the management plans and the local covenants
- hold a workshop to validate the ILMPs
- apply for formal recognition of the planning instruments
- translate the management plans and the local covenants into Fulani, Songhay and Bozo.

For the translations, it is recommended to create two-person teams: a professional translator in the target language and a bilingual person from the region who participated in the development of the management plans and the covenants. Oral translations on cassettes would be more appropriate than written translations.

Zoning and management plan for the overall "Lake Walado Débo" Ramsar site

In Recommendation 5.3 of the Ramsar Convention, the Contracting Parties emphasize the necessity for Ramsar sites to put in place zoning measures, including the full protection of key areas as well as various forms of wise use for the benefit of people.

Likewise, in Resolution 5.7, the Contracting Parties commit to: developing a management plan for each wetland; setting up appropriate legal and administrative structures, and allocating funds for the implementation of the management plans. The guidelines for these management plans are summarised in Box 1.

In the context of the Walado Débo site, the work that IUCN has done in the current project, which is based on the participation of local people in developing utilization rules and on the ratification of these rules through local covenants, is undoubtedly the best way to:

- 1) support the sustainable use of natural resources
- 2) begin planning at the scale of the lake.

Nevertheless, in the long term, a real management plan for the overall Ramsar site will be an essential tool to ensure the survival of the ecosystems and natural resources that are so important for the local people and for the economy of the country. With its grassroots planning experience and its success in

Youwarou, IUCN is well placed to support Mali in the development of a management plan for the Ramsar site, emphasizing the involvement of local people and decentralization in the implementation of the plan.

River-basin approach

In the first instance, the management rules should be expanded to the Youwarou Circle. For example, because of poor wood management, it is predicted that within two years, there will be no more wood in the Circle. What will then become of the forests of Akka-Goun and Dentaka?

For the Delta to continue playing its prime role in the economy of the country and in the well being of the people who depend on it, it will be necessary to ensure its ecological functioning in the long term. As the principal threats come from outside (water diversion by dams up-river, uncontrolled releases of water, and pollution), it is essential that the management of the system be done at the level of the river-basin.

Appendix A.

**SUPPORT PROJECT FOR WETLAND MANAGEMENT IN
THE INNER NIGER DELTA**

Terms of Reference for the Final Evaluation Mission

1. Context

In November 1998, the Netherlands Embassy in Bamako signed with the IUCN office in Mali, a 3-year period financing covenant to support the project of wetland management in the inland delta of river Niger. The project's general objective was to finalize and make operational the management plans of the Akka-Goun and Dentaka sites situated in the Youwarou Circle. In that perspective, three specific objectives were defined:

- ✓ develop local initiatives as regards the conservation of local resources;
- ✓ build capacities in the populations, technical services and non governmental organisations in the techniques of fish, plant and animal resource conservation and exploitation;
- ✓ lead local institutions to set up legal dispositions and mechanisms essential for the implementation of the principles of natural resources local management.

The financing agreement makes provisions for the organisation of a final evaluation at the end of field activities. On IUCN's request, the contractual time limit for the execution of the fieldwork that should have come to an end in December 2001 was extended by an amendment to the agreement until late March 2002. Therefore, the final evaluation was logically postponed to early 2002, by common consent between the Netherlands Embassy and IUCN through correspondence.

2. Objectives of the final evaluation

The general objective of the review is to assess and describe (qualitatively and quantitatively) the environmental, socio-economic and institutional impacts of the implementation of the project on the basis of the following elements (among others):

- ✓ interviews with the beneficiaries, partners and other participants in the field, and with IUCN and the Netherlands Embassy;
- ✓ direct observation of the activities carried out in the field;
- ✓ analysis of the various documents and reports produced since the beginning of the project.

The specific objectives for the final evaluation team are as follows:

- ✓ evaluate the efficiency and effectiveness of the project implementation and its appropriateness to the objectives of the project and to the financing agreement;
- ✓ record, analyse and evaluate the results achieved and their impacts on the environment and on the socio-economical situation of the beneficiaries;
- ✓ determine the relevance of the project activities in relation to the needs of Mali and of the beneficiaries with regard to conservation and the sustainable use of biodiversity;

- ✓ identify the lessons learned from the project, as well as specific areas and activities that could serve as examples for the beneficiaries, actors and partners.

3. Tasks of the evaluators

The specific tasks of the final evaluation mission are the following:

- ✓ analyse the basic documents (project document, working plans and financing agreement) and especially, the progress reports produced since the beginning of the project;
- ✓ assess the extent to which project activities have been carried out, in relation to the initial plan; examine their efficiency and their appropriateness to the objectives and results expected from the project;
- ✓ discuss with partners (State services, local authorities, other participants), actors and beneficiaries (including women and grassroots organisations) the approach of the project (partnerships, capacity building, transferring responsibility to the local people), as well as the extent to which the guidelines in the financing agreement have been applied;
- ✓ evaluate the efficiency of the work programmes developed to achieve the project objectives, while taking into account the evolution of the social and political constraints of the project area;
- ✓ evaluate the **degree of appropriation** of the project's activities by the local people and their **degree of involvement** in the implementation of the project in general, and more particularly in the development and implementation of the management plans and local covenants on natural resource management;
- ✓ analyse the impact of the project's activities (in relation to the needs and aspirations of the local people and the local authorities), and their coherence with the institutional context (especially decentralization) and with Mali's environmental policy;
- ✓ hold a debriefing meeting in the field to present the evaluation's first conclusions, and to seek feedback from representatives of the local people, local authorities, main actors and partners (including the Netherlands Embassy), who have been involved in the implementation of the project;
- ✓ write a final report to be submitted to IUCN and the Netherlands Embassy in Mali according to the timetable of the mission.

4. Limits of the evaluation

The management of the final evaluation mission should not in principle encounter major limits. However, the following points should be emphasized:

- ✓ the lack of an external half-way evaluation of the project, which would have allowed:
 - the consultants to save time in the review of some documents and in the analysis of the results achieved;
 - the project team to become aware of possible shortcomings in project implementation and to correct them in a timely manner;
- ✓ the remote and isolated location of the project area, and the difficulty in getting to some villages during the high water period.

5. Methodology

5.1. Data gathering

The methodology for collecting the information and data necessary for the evaluation should be carried out by the evaluators based on their field experience. The methodology should include at least four steps :

- ✓ gathering and reviewing key documents (project document, financing agreement, progress reports, work plans, reports of training sessions and exchange visits);
- ✓ interviews (with or without pre-established questionnaires) with: beneficiaries, local authorities, project partners (the National Department for Nature Conservation and Rural Development, NGOs and other projects intervening in the area ...), IUCN, and the Netherlands Embassy;
- ✓ visits to the main realisations of the project in the field;
- ✓ debriefing meeting of the initial findings to relevant individuals and institutions.

5.2. Composition of the evaluation team and profiles of the evaluators

The evaluation team will comprise two experts: an international expert, specialist in wetland conservation and management (head of the team) with strong experience in project evaluations, and a national expert in socio-economics with good knowledge of the country, and specially of the Inner Niger Delta. The latter should also have experience in the evaluation of socio-economical impacts of projects and be competent in gender issues and capacity building.

One of the experts will act as the leader of the team and will be responsible for the quality of the evaluation results and for the production of the final report.

A member of IUCN will accompany the team in the field. IUCN will provide assistance to the consultants in ensuring the logistics of the mission.

5.3. Schedule / Working programme

The evaluation will be carried out in February 2002. A six-day field mission is planned, with the rest of the time to be spent in Bamako. The work programme of the mission is as follows:

- | | |
|----------------------|--|
| 1 st day: | Briefing with the team of IUCN/Mali, exchange and possible clarification of the terms of reference, including the methodology |
| 2 nd day: | Briefing at the Netherlands Embassy
Encounter with the Ministry of Equipment, Town and Country Planning, and Environment
Encounter with the National Director of Nature Conservation
Data synthesis and document review |
| 3 rd day: | Trip from Bamako to Mopti |
| 4 th day: | Exposé by the project team, discussion of the mission's objectives and programme, and of the results of the project |

	Encounters with different partners (Regional Office for Nature Conservation, Wetlands International, NEF, etc.) and visit to the Mopti regional administrative authorities
5 th day:	Travel from Mopti to Youwarou (in the morning), followed by meetings with local authorities (in the afternoon)
6 th day:	Meetings with the local people of Youwarou and Akka-Goun; visit to the Local Management Committees and to village women's organisations Visit to activity sites of the project (vegetable gardening areas, fisheries equipped by the project, fences of the flood-risk forest of Akka-Goun, "bourgou" fields of Débaré and Akka-Goun, Kono Daga camp, etc)
7 th day:	Visit to the flooded Dentaka forest and to the protected flooded <i>Acacia kirkii</i> forest Formal and informal meetings with grassroots organisations and other resource persons selected by the consultants
8 th day:	Debriefing meeting of the initial findings of the mission in Youwarou, in the presence of the representatives of the local people, local authorities, partners, IUCN, and the Netherlands Embassy
9 th day:	Back to Mopti
10 th day:	Trip back from Mopti to Bamako
11 th day:	Debriefing at the Netherlands Embassy in Bamako and departure

An internal meeting of the consultants is programmed at the end of each day in order to allow them to share their observations and the results of their visits and interviews.

The consultants will have a maximum limit of ten days after the mission to submit a draft final report to the Netherlands Embassy and to IUCN, who should provide comments within a seven days. From the date the comments are received, the consultants will submit their definitive report within five days. The report will be presented as two hard copies, and on a diskette containing the file of the report in Word format.

6. Financing the evaluation mission

The expenses related to the evaluation mission will be paid for project, from the budget line managed by IUCN/Mali explicitly for to this purpose.

7. Documents to be put at the disposal of the review team

The following documents, at least those existing in digital form, will be provided to the consultants one week before the start of the mission, to allow them to become familiar with the project before the start of the mission.

- The project document
- All activity reports (half-yearly and yearly), and work plans
- The financing agreement of the project

- The Integrated Land Management Plans (ILMP) of Akka-Goun and Dentaka
- The local management covenants developed and agreed by the populations with the help of the project
- The reports on the training sessions and exchange visits
- The report of the socio-economic impact survey of *bourgou* in the Youwarou area
- The list of the organisations to be visited (with people's names if possible) including resource people and grassroots organisations), in addition to other sources of information that the consultants will have defined themselves
- Any other document that can help in the appreciation of the actions of the project in the area of intervention.

Appendix B.

EVALUATION MATRIX

FINAL EVALUATION OF THE SUPPORT PROJECT FOR WETLAND MANAGEMENT IN THE INNER NIGER DELTA				
Theme	Key issues	Detailed questions	Indicators	Sources of data
Relevance	How does the project address the needs of Mali?	<ul style="list-style-type: none"> • Is the project an integral part of the overall rural development policy of the country? • How does the project relate to the national strategic framework (NEAP, National Programme for the fight against desertification)? 		National Policies. Pastoral charter. Law 95-32. Interviews. Project documentation.
	How does it address the needs of the beneficiaries with regard to the conservation and sustainable use of biodiversity?			Interviews. Field visits.
	To what extent does the project contribute to IUCN's strategic priorities?			IUCN's Strategic Plan for West Africa.
Effectiveness	To what extent has the project achieved its objectives and its expected results? (see the project logical framework with the expected results, the indicators, and the results achieved)	Has the Youwarou-Akka Integrated Land Management Plan (ILMP) been published?	<ul style="list-style-type: none"> • Degree of involvement in its formulation? • ILMP adopted? • operational? • official legal recognition? • recourse to ILMP for arbitrations? 	Logical framework of the project. Project documentation. Field visits. Interviews.
		Has the Dentaka ILMP been published?	Idem	Idem

		What are the strong points and the weak points of local initiatives in the project?	<ul style="list-style-type: none"> • Regeneration of <i>bourgou</i>? • Forest monitoring? • Market gardening? • Fish transformation? • Credit and savings banks? • etc. 	Visits. Interviews.
		How has the project built capacities in: <ul style="list-style-type: none"> • local people? • technical services? • NGOs? • others? 		Interviews.
	Has the project practised adaptive management?	<ul style="list-style-type: none"> • What lessons has the project learned from the earlier phases? • Is there evidence of adaptive management (self-evaluations; follow-up system, monitoring and decisions based on the continuous supply of information) ? 		Documentation of the previous phases of the project. Interviews.
Efficiency	To what extent does the project use its resources cost-effectively?		Results / costs ratio.	Financing agreement. Financial reports. Visits to achievements. Observations.
Impact	What is the impact of the project on biodiversity and the environment?	<ul style="list-style-type: none"> • Are natural resources managed in a more balanced manner? • What is the current state of natural resources in comparison with the past? 	Loss of resources stopped in 80% of the area?	Visits in the field. Interviews. Documentation.
	What is the impact of the project on the socio-economic situation of the beneficiaries?	<ul style="list-style-type: none"> • What are the results of the women's activities? • What are the results of processing and trading local products? • Have people experienced an improvement in their socio-economic situation and/or their quality of life thanks to the project? 		Idem.

	Are there unforeseen impacts?			Interviews.
Sustainability	Has the approach of the project favoured the sustainability of the results?	<ul style="list-style-type: none"> • What are the long-term strategies with regard to the overexploitation of natural resources? • Is there an equitable involvement of women in the various management structures? • What was the degree of involvement of the different groups in the development of the management plans and other activities of the project? • What is the quality of the partnerships of the project? • Is there any multiplier effect of the local initiatives? 		Field visits. Interviews. Document review.
	Which results could be further built upon by the beneficiaries?			Interviews with beneficiaries.
	Which results could be further built upon by partners?			Interviews with partners.
Lessons	What lessons can be learned from this project?			Interviews.

Appendix C.

INTERVIEW PROTOCOL OF THE FINAL EVALUATION MISSION

SUPPORT PROJECT FOR WETLAND MANAGEMENT IN THE INNER NIGER DELTA

Evaluation team: Ms Meg Gawler, international expert and Dr Bréhima Bériidogo, national expert.

Introduction

IUCN undertakes evaluations for two main reasons:

- IUCN is accountable to its members, partners and donors as regards the smooth running of its projects. An external evaluation process is part of IUCN's engagement to favour openness and accountability.
- An evaluation gives IUCN and its partners an opportunity to learn in a creative manner how to improve its work and make its projects and programmes more efficient. An evaluation helps us understand why activities succeed and why they fail.

Thus, the aim of the evaluation is to increase our knowledge regarding best practices in the field of conservation and development.

So that this evaluation is successful, we ask you to talk frankly with us. We promise total discretion concerning this conversation. Moreover, be reassured that the sources of the information collected during this mission and specially this conversation will be kept strictly anonymous.

Objectives of the final evaluation

The general objective of this evaluation is to assess the environmental, socio-economical and institutional impacts of the implementation of the Support Project to the Wetland Management in the Inner Niger Delta and to identify lessons learnt from the project.

The specific objectives are the following:

1. **Relevance**: determine the relevance of the activities of the project in relation to the needs of Mali and of the beneficiaries, in conservation and the sustainable use of biodiversity.
2. **Effectiveness**: assess the effectiveness of the activities implemented and their appropriateness with the objectives of the project and the financing agreement.
3. **Efficiency**: appraise the level at which the project has used its resources cost-effectively.
4. **Impact**: list, analyse and evaluate the results achieved and their impacts on the environment and on the socio-economic situation of the beneficiaries.
5. **Sustainability**: identify areas and the specific activities that could be taken forward by beneficiaries, actors and partners.

The methodology for gathering the information and data required for the evaluation will comprise four steps:

- ✓ Study of the documentation available on the project;
- ✓ Discussion with beneficiaries, local authorities, partners of the project (offices of the National Department for Nature Conservation, Rural Development, NGOs and other projects operating in the project area ...), IUCN, and the Netherlands Embassy;
- ✓ Visits to the main achievements of the project in the field;
- ✓ A de-briefing workshop to solicit reacts to initial findings of the evaluation.

This interview represents a key step towards a better understanding of what took place during the project.

We propose that our discussion be organised around the following questions, but we are also open to possible suggestions coming from you in order to structure our discussions.

We are quite aware that your time is valuable and we thank you sincerely for sharing your observations with us.

Key questions: 1st series

Wide perspective - DNCN, International NGOs, Embassy et al.

1. What can you tell us about this project?
 2. In your opinion, what is the most important success of this project (if any)?
 3. Do you want to mention other important achievements?
 4. Have you observed any weaknesses in the project?
 5. What areas (if any) still need support?
 6. Has the project targeted the priorities of Mali, of the project area, and of the beneficiaries?
 7. Is its approach adapted to the realities of the beneficiaries and partners?
 8. Are there achievements or activities that have a strong probability of continuing once the project is over?
- Do you want to talk about lessons that can be learned from this project?
 - Is there any thing else you would like to add?

Key questions: 2nd series

Technical partners: State technical services and local NGOs

2. Can you describe the history and functioning of your partnership with the project?
3. What has the project brought to you?

4. What has been your contribution to the project?
 5. On the whole, what is the most important success of this project (if any)?
 6. Do you want to mention other important achievements?
 7. Have you observed any weaknesses in the project?
 8. Has the project targeted the priorities of Mali, of the project area, and of the beneficiaries?
 9. Is its approach adapted to the realities of the beneficiaries and partners?
 10. Are there achievements or activities that have a strong probability of continuing once the project is over?
- Do you want to talk about lessons that can be learned from this project?
 - Is there any thing else you would like to add?

Key questions: 3rd series

Benefiting populations

1. Can you describe the history and functioning of your partnership with the project?
 2. Tell us about the environment before and after your collaboration with IUCN.
 3. What has the project brought to you?
 4. What has satisfied you in the execution of this project? Or on which points did you disagree with the project and IUCN?
 5. What will remain of all this after the project ends?
- Do you want to talk about lessons that can be learned from this project?
 - Is there any thing else you would like to add?

Optional Questions

1. What is the specificity of the current project?
2. What has been your degree of involvement in the execution of the project?
3. What activities did you carry on within the project?

4. In which activities did you not take part?
5. What did you learn individually and collectively?
6. What did you get in terms of securing livelihoods?
7. What could the project have brought to you?
8. What areas (if any) still need support, especially at the level of the local people?

Appendix D.

AGENDA FOR THE MISSION

<u>Day</u>			
1 st	Mon	04.02.02:	Briefing with the team of IUCN/Mali. Encounter with the National Director for Nature Conservation. Study of documents. Developing the methodology.
2 nd	Tue	05.02.02:	Study of documents. Developing the methodology, continued. Briefing at the Netherlands Embassy.
3 rd	Wed	06.02.02:	Travel Bamako / Mopti / Sévaré. Briefing with the Project Coordinator.
4 th	Thu	07.02.02:	Visit to the High Commissioner of the Mopti Region. Encounter with the different partners (Regional Department for Nature Conservation, Regional Department for Regulation and Control, Operation Fishery, Wetlands International, Walia).
5 th	Fri	08.02.02:	Travel Sévaré / Sélingué / Youwarou. Visit to local authorities (late afternoon). Encounter with the Head of the Fishing Sector of Akka.
6 th	Sat	09.02.02:	Encounter with the populations of Youwarou, Akka-Goun and those of Konodaga camp. Visit of vegetable gardens / to village women's associations, of fisheries equipped by the project and to Women's cash-boxes. Encounter with the Village Councillor, Local Management Committees, and the Head of SLACAER.
7 th	Sun	10.02.02:	Encounters with the populations of Dentaka. Visit of the Dentaka flooded forest.
8 th	Mon	11.02.02:	Youwarou: Encounter with the Nature Conservation Office, the Council of the Youwarou Circle, the Town hall and the Town council of Youwarou and the Association for the Promotion and Conservation of Lake Débo. Debriefing session to present the initial findings of the Youwarou mission, in the presence of beneficiaries, local authorities, partners, and IUCN.
9 th	Tue	12.02.02:	Travel Youwarou / Sévaré.
10 th	Wed	13.02.02:	Travel Sévaré / Bamako. Encounter with the Project Coordinator.
11 th	Thu	14.02.02:	Study and analysis of documents (continued). Synthesis of the data.
12 th	Fri	15.02.02:	Encounter with the IUCN Head of Mission. Debriefing at the Netherlands Embassy in Bamako. Synthesis of the data (continued). Begin writing report. Departure of the members of the evaluation mission.

Appendix E.

LIST OF PERSONS ENCOUNTERED

N°	Date	Place	Name	First name	Occupation
1	04/02/02	Bamako	Faye	Aliou	Coordinator UICN / Mali
2	04/02/02	Bamako	Mahalmoudou	Hamadoun	Principal programme leader UICN / Mali
3	04/02/02	Bamako	Tamboura	Yaya	National Director for Nature Conservation
4	04/02/02	Bamako	Samassékou	Sory	Head of the Training and communication section
5	05/02/02	Bamako	Mme Danté née Thiéro	Danté	Councillor, Development assistance, the Netherlands Embassy
6	06/02/02	Sévaré	Tiéro	Mamadou	Coordinator of the Support project to the management of wetlands in the inland delta of the River Niger
7	07/02/02	Sévaré	Sanogo	Moumouni	Head of the planning division, Regional office for Nature conservation
8	07/02/02	Sévaré	Gareyane	Mohamed	Project leader for Forest resource planning, Regional office for Nature conservation
9	07/02/02	Sévaré	Ba	Mamadou	Head of the Regulation and control section, Regional office for Nature conservation
10	07/02/02	Mopti	Boiré	Soungalo	Principal private secretary of the Government High Commission
11	07/02/02	Mopti	Sanogo	Flatié	Economic councillor of the Government High Commission
12	07/02/02	Mopti	Kéïta	Madi Maténé	Regional director of the Regulation and control of the rural development section office
13	07/02/02	Mopti	Dolo	Apam	Assistant manager of the Fishing operation
14	07/02/02	Mopti	Coulibaly	Tiémo	Project leader for aquaculture and fisheries management at the Fishing operation
15	07/02/02	Mopti	Théra	Léwa	Head of the fishing section - Mopti, Fishing operation
16	07/02/02	Sévaré	Koné	Bakary	Coordinator of the Mali PIN project, Wetlands International
17	07/02/02	Sévaré	Balla	Alassane	Coordinator of Walia NGO
18	07/02/02	Sévaré	Koné	Sidiki	Programme leader / Walia NGO
19	08/02/02	Youwarou	Tiao	Sory Tiao	Village Chief of Homboloré
20	08/02/02	Youwarou	Diabaté		Deputy prefect of Youwarou
21	08/02/02	Youwarou	Dienta	Ibrahima	Head of the fishing section, Operation Fishing
22	08/02/02	Youwarou	Bocoum	Aminata	Vice-President of Association Hiden Bella Youwarou
23	09/02/02	Youwarou	Me Kassé née Gakou	Wandé	President of Association Hiden Bella Youwarou
24	09/02/02	Youwarou	Kassé	Dikoré	Member of Association Hiden Bella
25	09/02/02	Youwarou	Mme Sangho née Kassé	Anta	Organiser of Association Hiden Bella Youwarou

26	09/02/02	Youwarou	Kouyaté	Dicko	Deputy treasurer of Association Hiden Bella Youwarou
27	09/02/02	Youwarou	Coulibaly	Dado	Auditor of Association Hiden Bella Youwarou
28	09/02/02	Youwarou	Yattara	Lalla	Member of Association Hiden Bella Youwarou
29	09/02/02	Youwarou	Traoré	Belco	Member of Association Hiden Bella Youwarou
30	09/02/02	Youwarou	Mme Bocoum	Aïssata	Secretary general of Association Hiden Bella Youwarou
31	09/02/02	Youwarou	Anta	Allay	Member of Association Hiden Bella Youwarou
32	09/02/02	Youwarou	Hamé	Boulel	Member of Association Hiden Bella Youwarou
33	09/02/02	Youwarou	Togo	Félix	Head of the department of consultancy, planning and rural equipment
34	10/02/02	Dentaka	Kamata	Sounké	Village Chief of Dentaka
35	10/02/02	Dentaka	Kanta	WayandoAli	Notable
36	10/02/02	Dentaka	Dicko	Abdoulaye	Trader
37	10/02/02	Dentaka	Tienta	Soumeïla	Carrier
38	10/02/02	Dentaka	Kamanta	Nouhoum	Notable, younger brother of the village chief
39	10/02/02	Dentaka	Nabo	Sory	Notable
40	10/02/02	Dentaka	Tienta	Bokari Omar	Fisherman
41	10/02/02	Dentaka	Tiamanta	Abdoulaye	Member of the Akagoun – Dentaka managing committee
42	10/02/02	Youwarou	Nialibouly	Boubacar	Head of the Nature Conservation department
43	11/02/02	Youwarou	Mme Traoré née Djigui	Mariam	2 nd vice-president of the cercle council
44	11/02/02	Youwarou	Diarra	Boubacar	Secretary general of the cercle council
45	11/02/02	Youwarou	Kassé	Baba	Vice-president of the cercle council
46	11/02/02	Youwarou	Traoré	Sékou Békaye	1st deputy mayor
47	11/02/02	Youwarou	Moukoro	Mamadou	2 nd deputy mayor
48	11/02/02	Youwarou	Traoré	Mahamane Ibélé	Local councillor
49	11/02/02	Youwarou	Traoré	Bayon	Local councillor
50	11/02/02	Youwarou	Diabaté	Yacouba	Deputy prefect
51	11/02/02	Youwarou	Bâ	Moussa	Sub-prefect
52	11/02/02	Youwarou	Thiao	Sory Amirou	Village chief
53	11/02/02	Youwarou	Kassé	Baba	1 st Vice-president of the cercle council
54	11/02/02	Youwarou	Traoré	Bayon	AAPC NGO
55	11/02/02	Youwarou	Traoré	Mahamane Ibélé	Resource person, member of city council
56	11/02/02	Youwarou	Kassambara	Aïssata	Member of Aka Goun management committee
57	11/02/02	Youwarou	Konta	Sékou	Member of Aka Goun management committee
58	11/02/02	Youwarou	Touré	Mahamane	Member of Aka Goun management committee
59	11/02/02	Youwarou	Bocoum	Guidado	Member of Aka Goun management committee

60	11/02/02	Youwarou	Fofana	Alpha	Member of Aka Goun management committee
61	11/02/02	Youwarou	Traoré	Sékou Békaye	1 st Deputy mayor of Youwarou district
62	11/02/02	Youwarou	Togo	Félix	Head of the department of consultancy, planning and rural equipment
63	11/02/02	Youwarou	Dolo	Dogalou	Consultant CCC/PACR-M
64	11/02/02	Youwarou	Cissé	Souleymane Salif	SLRCSORY
65	11/02/02	Youwarou	Thiéro	Mamadou	UICN
66	11/02/02	Youwarou	Maïga	Mahamadou	UICN
67	11/02/02	Youwarou	Bocoum	Yaya	Notable, Ouro

Appendix F.

LIST OF DOCUMENTS CONSULTED

Project Documents:

- Document de projet (août 1998)
- Contrat de financement du 19 novembre 1998 entre l'Ambassade Royale des Pays-Bas et l'UICN Mali
- Plan de travail annuel 1999 (version révisée, mai 1999)
- Atelier de lancement du projet d'appui zones humides de delta intérieur du Niger (mai 1999)
- Rapport semestriel, janvier-juin 1999
- Développement du programme de conservation des zones humides de Mali (septembre 1999)
- Rapport d'atelier de formation en gestion des terroirs villageois (novembre 1999)
- Comptes rendus de missions 1999
- Rapport annuel 1999 : Rapport d'avancement du projet d'appui à la gestion des zones humides du delta intérieur du Niger (janvier 2000)
- Compte rendu – Réunion de conception Wetlands-UICN-NEF (W.U.N.) (janvier 2000).
- Plan annuel, janvier – décembre 2000
- Rapport d'évaluation du Comité de Suivi (avril 2000)
- Compte rendu de mission de l'atelier d'élaboration du plan de gestion d'Akka-Goun (juin 2000)
- Rapport semestriel du 1^{er} janvier au 30 juin (juillet 2000)
- Rapport annuel 2000 : Rapport d'avancement du projet d'appui à la gestion des zones humides du delta intérieur du Niger (février 2001)
- Règles de gestion de la commune de Youwarou
- Projet d'appui à la gestion des zones humides du delta intérieur du Niger : Programme l'an 2001.
- Audit des comptes du projet zones humides / UICN, exercice 2000. Areci société comptable (février 2001).
- Règles de gestion des pêcheries de la Commune rurale de Youwarou. Commune de Youwarou (février 2001)
- Convention locale de gestion de la forêt de Dentaka. Association NEEMA/Dentaka (juin 2001)
- Convention locale de gestion de la forêt de Akka-Goun. Association pour la gestion de la forêt de Akka-Goun (juin 2001)
- Rapport semestriel du 1^{er} janvier au 30 juin 2001 (juillet 2001)
- Rapport de la formation sur « les aspects socio-économiques des zones humides » (juillet 2001)
- Rapport de l'atelier de réflexion sur l'élaboration des règles de gestion des bourgoutières de Débaré et Akka-Goun de Youwarou-Deboye (septembre 2001)
- Règles de gestion des bourgoutières de Débaré et Akka-Goun de Youwarou-Deboye. Communes rurales de Deboye et de Youwarou (septembre 2001)
- Visite d'échange d'expériences des populations de Youwarou-Akka et de Dentaka (delta intérieur du fleuve Niger) au Sénégal et en Mauritanie (décembre 2001)
- Etude d'impacts socio-économiques de la régénération du bourgou dans la zone de Youwarou – Delta intérieur du Niger (décembre 2001)
- Plan de gestion intégrée de terroir de Youwarou-Akka. Communes rurales de Deboye et de Youwarou (décembre 2001)
- Plan de gestion intégrée de terroir de Dentaka. Commune rurale de Deboye (décembre 2001)
- Rapport annuel 2001 : Rapport d'avancement du projet d'appui à la gestion des zones humides du delta intérieur du Niger (février 2002).

Other documents:

- Beintema, A.J., Fofana, B. & Diallo, M. 2001. Gestion des forêts inondées dans le Delta Intérieur du Niger, Mali. Alterra, Green World Research, Wageningen, Pays-Bas. 56 pp.

- Ramsar Convention Bureau. 2000a. *Manuels Ramsar pour l'utilisation rationnelle des zones humides : Mise en œuvre et renforcement de la participation des communautés locales et des populations autochtones à la gestion des zones humides*. Bureau de la Convention de Ramsar, Gland, Suisse. 91 pp.
- Ramsar Convention Bureau. 2000b. *Manuels Ramsar pour l'utilisation rationnelle des zones humides : Cadres pour la gestion des zones humides d'importance internationale et autres zones humides*. Bureau de la Convention de Ramsar, Gland, Suisse. 58 pp.
- Coulibaly, Z., Ndiaye, P. & Wit, P. 1999. Renforcement des capacités institutionnelles pour la gestion des ressources des zones humides en Afrique de l'Ouest. Rapport de la mission d'évaluation externe. AIDEnvironment, Amsterdam, Pays-Bas. 70 pp.
- Diakité, C.H., Courel, M.F. et Schilling, M.A. 2000. Suivi de l'écosystème dans le delta intérieur du Niger (Mali). In : GEPIS (2000) *Vers une gestion durable des plaines d'inondation sahéliennes*. UICN, Gland, Suisse. 177-183.
- Gawler, M. 2001. *Project Design and Project Cycle Management Sourcebook*. ARTEMIS Services, Préveessin-Moëns, France. 74 pp.
- Gawler, M. 2002. What are best practices? Lessons in participatory management of inland and coastal wetlands. In: Gawler, M. (ed.) 2002. *Strategies for Wise Use of Wetlands: Best Practices in Participatory Management*. Proceedings of a Workshop held at the 2nd International Conference on Wetlands and Development. Wetlands International Publication No. 56, Wageningen, Pays-Bas. 1-12.
- GEPIS 2000. *Vers une gestion durable des plaines d'inondation sahéliennes*. UICN, Gland, Suisse. 214+ pp.
- Government of Mali. 2000. Observatoire du développement humain durable : Rapport 2000, Bamako.
- Hughs, R.H. & Hughs, J.S. 1992. *A Directory of African Wetlands*. IUCN, Gland, Suisse. 820 pp.
- van der Kamp, J. & Diallo, M. 1999. Suivi écologique du Delta Intérieur du Niger: les oiseaux d'eaux comme bioindicateurs. Recensements crue 1998-1999. Mali-PIN publication 99-02. Wetlands International, Sévaré, Mali / Altenburg & Wymenga, Veenwouden, Pays-Bas.
- Kone, B., Diallo, M. & Maiga, A.M. 1999. L'exploitation des oiseaux dans le delta intérieur du Niger. Mali-PIN publication 99-03. Wetlands International, Sévaré, Mali / Altenburg & Wymenga, Veenwouden, Pays-Bas. 25+ pp.
- Ministère de l'Équipement, de l'Aménagement du Territoire, de l'Environnement et de l'Urbanisme. 2000. Stratégie nationale en matière de diversité biologique (version provisoire). République du Mali. 115 pp.
- Ramsar Convention on Wetlands. 2002. *The Annotated Ramsar List. A* : http://www.ramsar.org/profiles_mali.htm.
- Sanogho, N.N. 1999. Les sites maliens de Ramsar. Ministère de l'Environnement, République du Mali

Appendix G.

LOGICAL FRAMEWORK OF THE PROJECT

(Source: Project Document, August 1998)

LOGICAL FRAMEWORK	INTERVENTION LOGIC	INDICATORS	SOURCE OF VERIFICATION	ASSUMPTIONS
GOAL	Contribute to the conservation and sustainable use of wetlands in Mali	The loss of resources is stopped before 2001 on at least 80% of the area of the sites. Their harnessing is more balanced.	Evaluation reports of policies, programmes and projects of the area and/or region.	Stability and minimal rainfall.
GLOBAL OBJECTIVE	Set management plans and make them operational for two identified sites.	<ul style="list-style-type: none"> Official administrative and legal acts for the recognition of the management plans of the two sites; Number of recourses to the management plans for the arbitrations and concerted exploitation of resources. 	<ul style="list-style-type: none"> Official recording registers; Minutes of meetings and/or town council sessions, and publication of legal deeds. 	Setting up and starting up of town councils in 1998. Availability and commitment of populations.
SPECIFIC OBJECTIVES	<ul style="list-style-type: none"> Develop local initiatives regarding the preservation and sustainable use of natural resources; Build capacities in the populations, State technical services and NGOs in the techniques of preservation and exploitation of resources; Bring local institutions to set up legal dispositions and mechanisms necessary for the implementation of the principles of local management of resources. 	<ul style="list-style-type: none"> Number of initiatives (eight) or interventions listed at the level of the stakeholders and their taking into account in the activities of the project Number of training and information sessions (five), number of people trained (90% of the population interested in the harnessing), Level of training; Number of approaches and nature of the supports from the institutions; 	<ul style="list-style-type: none"> Reports and documents of the project; idem 	Willingness of populations and stakeholders
RESULTS	<ul style="list-style-type: none"> The Akka-Goun Management Plan is revisited, accepted; A second site is identified, and a management plan is elaborated and accepted for that site; The two management plans are 	<ul style="list-style-type: none"> The documents are available in French and in national languages; The documents are available in French and in national languages; Recognition acts; 	<ul style="list-style-type: none"> Acknowledgment receipt; 	

	<p>recognised at the administrative and legal levels;</p> <ul style="list-style-type: none"> - Small development projects are identified and implemented on the two sites and are about market gardening, birds subtraction, processing of local products; - Actions of resource preservation are carried out relating to the regeneration of bourgou, reforestation, restoration of degraded zones and fight against mimosa. 	<ul style="list-style-type: none"> • Number of small projects (eight): Nature and Size: number of beneficiaries, specially women (95%). Income and spreading; • Number of preservation actions (four). Nature and area (whole area). Number of people taking part in the actions (95% of interest groups), area restored (95%). 	<ul style="list-style-type: none"> • Idem • Half-yearly report and yearly reports; visits and enquiries, meeting reports. 	
ACTIVITIES	<ul style="list-style-type: none"> - Review of the survey of the resources and of the socio-economic study of the Akka-Goun site; - Appraisal of the differences that occurred since the stoppage of the activities; - Renewal of participatory bodies. - Training and information of interest groups and town council, - Identification, formulation and implementation of small industry development projects; - Identification, formulation and implementation of natural resource conservation actions; 	<ul style="list-style-type: none"> • Number and quality of local, regional, national and foreign resource persons; • Number, Nature and Quality of bodies, number of new members, representativeness of women, Quantity and quality of human and financial resources • Training fees, Nature and quantity of teaching material, quantity of resource people • Nature, Quality and Quantity of infrastructures and small equipment, Amount of loans, Number and quality of resource persons; 	<ul style="list-style-type: none"> • Budget • Idem • Idem 	Signature of the convention between IUCN and the Donor.
	<ul style="list-style-type: none"> - Complete the management plan, have it adopted and take the steps for its administrative and legal recognition; - Study the definition of environmental and socio-economic criteria and determination of the main 	<p>* Fees for dialogue meetings, meetings, expertise, steps to take and fees for the</p>		

	<p>characteristics of the second site;</p> <ul style="list-style-type: none"> - Training and information sessions on the diagnosis and elaboration of management plans for the different interest groups; - Structuring and animation of organisations and associations; - Identification, formulation and implementation of small industry development projects; - Identification, formulation and implementation of actions for natural resource conservation; - Concerted elaboration of a management plan and approaches for its official adoption as well as its adoption as a legal instrument. 	<p>drawing of plans</p> <ul style="list-style-type: none"> • Idem • Idem • Idem 		
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Appendix H.

SELF EVALUATION BY THE PROJECT COORDINATOR February, 14 th 2002 RESULTS OF THE PROJECT WITH REGARD TO ITS LOGICAL FRAMEWORK SUPPORT PROJECT TO WETLAND MANAGING IN THE INNER NIGER DELTA December 1998 to February 2002			
LOGICAL FRAMEWORK OF THE PROJECT DOCUMENT (August 1998)		RESULTS OF THE PROJECT (February 2002)	
INTERVENTION LOGIC	INDICATORS	ACHIEVEMENTS	PROBLEMS ENCOUNTERED
Goal			
Contribute in the preservation and sustainable use of wetlands in Mali	The loss of resources is stopped before 2001 on at least 80% of the area of the sites; their exploitation is more balanced	The two forests are fully protected	Divagation of extraneous breeder's animals
Global Objective			
Prepare management plans for the two identified sites and make them operational	<ul style="list-style-type: none"> • Official administrative and legal acts of recognition of the management plans of both sites • Number of recourses to the management plans for the arbitrations and concerted exploitation of resources 	4 local covenants for the management of resources are available The allocation and current use of lands are accepted by all the actors	Opposition of traditional land owners to the elaboration of new management rules
Specific Objectives			
Develop local initiatives regarding the preservation and sustainable use of natural resources	Number of initiatives (eight) or interventions listed at the level of interest groups and their taking into account in the activities of the project	Regeneration of bourgou, destruction of <i>Mimosa pigra</i> , Chorkor ovens, monitoring of the two forests, planting quickset hedges, market gardening, poultry-farming, bee-keeping, savings-banks and credit banks managed by women themselves	Delays in the availability of funds Hives without outputs in Youwarou Unsatisfied need for credit to women because of the weakness of working capitals
Build capacities in the populations, State technical services and NGOs in the techniques of conservation and exploitation of resources	Number of training and information sessions (five), number of people trained (90% of the population interested in exploitation), Level of training	Themes of training: land management (30 people trained), gender and development (25), Credit /savings management (25), processing of cereals (15), two survey travels for 23 people	Difficulty in mobilizing funds and trainers for Youwarou
Bring local institutions to set up legal	Number of approaches and nature of the	Arbitration of management committees in	Only the state service is entitled to fine

dispositions and mechanisms necessary for the implementation of the principles of local management of	supports by the institutions;	the managing of Akka-Goun bourgou field at least 6 times and Dentaka forest at least three times.	offenders The transfer of property ownership is not yet actual.
Results			
Akka-Goun management plan is revised and accepted	The documents are available in French and in national languages.	Accepted and available in French	<ul style="list-style-type: none"> • Lack of methodological support to the coordinator in the elaboration of managing plans • Lack of funds for the execution of planned activities • Difficulty in getting to the sites • Mobility and sometimes dispersion of the fishers
A second site is identified and a management plan is elaborated and accepted for that site	The documents are available in French and in national languages	Accepted and available in French	Idem
Both management plans are recognised at the administrative and legal levels	Deeds of recognition	-	Long time taken in completing the drafts of plans have aggravated the already existing delay registered by the project.
Small development projects are identified and implemented in the two sites and they are about market gardening, bird subtraction, local products processing	<ul style="list-style-type: none"> • Number of small projects (eight) • Nature and size: number of beneficiaries, women particularly (95 %) • Income and propagation 	<ul style="list-style-type: none"> • At least 8 developing projects have been implemented • 450 women are direct beneficiaries in vegetable gardening, • 286 women are beneficiaries of credits • 3 women profitably commercialise their processed cereals 	<ul style="list-style-type: none"> • The working budget allocated to the coordinator does not permit many visits in the field. • Attack of crops by insects • Weak financial cover to satisfy all the applications • Lack of equipment and premises for savings-banks and loan-banks • Lack of accurate support and close monitoring device
Resource conservation actions are carried out relating to bourgou regeneration, reforestation, restoration of degraded zones and fight against mimosa	<ul style="list-style-type: none"> • Number of preservation actions (four) • Nature and extent (all the area) • Number of people participating in the actions (95% of the members of interest groups) • Restored area (95%) 	<ul style="list-style-type: none"> • At least 4 actions have been implemented • 230 ha have been regenerated with bourgou • <i>Mimosa pigra</i> has been destroyed over 450 ha at Débaré • 2 ha of mimosa have been transformed into bourgou fields 	<ul style="list-style-type: none"> • Weak rainfall and precocity of flood in 2000 • Delays in disposing of the funds • Stranglehold of notables on the regeneration of bourgou

Activities			
Review of the survey of resources and of the socio-economic study of the Akka-Goun site	Number and quality of local, regional, national and foreign resource people	<ul style="list-style-type: none"> • 3 experts from Niger • 4 experts of the AGEFORE bureau • 2 national consulting experts • 1 regional person • 50 local people 	<ul style="list-style-type: none"> • Limitation in the choice of the trainers because of the distance and difficulty in getting to the site.
Appraisal of the differences that have occurred since the stoppage of the activities		---	
Renewal of participatory bodies	<ul style="list-style-type: none"> • Number, nature and quality of bodies • Number of new members. • Representativeness of women • Quantity and quality of financial and human resources 	<ul style="list-style-type: none"> • 1 monitoring committee for the activities of the project • 2 savings-banks and loan-banks managed by women • 2 associations for forest protection in which 6 women are heads of some positions in the bureaux 	Weak support of the donor to the activities of savings banks and loan banks'
Training and information of interest groups and town council		<ul style="list-style-type: none"> • Training of women in micro-credit • Making representatives familiar with planning and town council deliberation tools • Radio and television broadcasts on international conventions, local covenants and management plan 	Lack of FM radio in Youwarou Just one presenter for radio broadcastings in Mopti.
Identification, formulation and implementation of small industry development projects	<ul style="list-style-type: none"> • Training fees • Nature and quantity of teaching material • Number of resource people 	<ul style="list-style-type: none"> • Introduction of 10 Kenyan hives and training of 12 beekeepers for the development of bee-keeping • Vaccination of poultry (2800 fowls in way of demonstration and training of 5 village vaccinators for the 5 villages) • Training of 120 fishers in the use of Chorkor ovens for 350 clays supplied by the project in way of demonstration 	<ul style="list-style-type: none"> • Bee-hives are not populated in Youwarou • Vaccination often made in already declared centres of illnesses reducing the effects of vaccination • Difficulty in complying with the technical norms (plan of the oven and number of necessary clays)
Identification, formulation and implementation of natural resources conservation actions	<ul style="list-style-type: none"> • Nature, quality and quantity of infrastructures and small material • Amount of loans • Number and quality of resource persons 	<ul style="list-style-type: none"> • Talks and debates, radio and TV broadcastings have been used for the awareness raising and mobilisation of populations and authorities. • 4 workshops have been programmed to elaborate 4 local managing covenants 	

		<ul style="list-style-type: none"> The expansion of <i>Mimosa pigra</i> is lessened on the patches of Débaré through the mobilization of high intensity work force 	<p>A risk of reappearance of mimosa young shoots by the dissemination due to wind and floods</p> <p>Animal divagation</p>
Finalize the management plan, have it adopted and take the necessary steps for its administrative and legal recognition	Fees for consultations, meetings, expert's analyses, steps taken and fees for the confection of plans	Participatory and iterative process for the elaboration of management plans	Long finalisation
Study of the definition of environmental and socio-economical criteria and determination of the principal characteristics of the second site.		The selection of the second site is imposed by the relevancy of its vegetation and the very important role that it plays as a dormitory and a nesting place for water birds	Difficulty of access to the sites and dispersion of the populations of the site
Training and information sessions on the diagnosis and elaboration of management plans for the different interest groups		A training session for 30 participants on the theme of village land management	Difficulty in the selection and mobilisation of trainers in Youwarou
Structuring and livening up of organisations and associations		Institutional reinforcement of 4 associations (the two banks and the associations related to the two forests)	The legislative supports are ill adapted and the procedures for the recognition of banks are very long

Appendix I.

QUOTATIONS

To end this evaluation report, we present some direct quotations from the respondents.

"The Inner Niger Delta is an ecological miracle for Mali."

"The project was an opportunity for the local people and the technical services to discover one another."

"Through the Covenants and the Land Management Plans, the local people found ways to debate, to understand one another, and to settle conflicts. That has allowed everyone to feel truly involved. This is the first time these people (pastoralists, fishers, and farmers) have worked together."

"If today such species as the crowned crane exist in the delta, it's thanks to IUCN."

"The examples of the two still existing forests (Akka-Goun and Dentaka) prove that it is possible for local communities to be involved in the protection and maintenance of such sites. The protection of Akka-Goun and Dentaka forests are the direct or indirect results of earlier activities in the area by IUCN." (Beintema et al. 2001)

"IUCN is a hero for having organized the workshops."

"One cannot cut so much as a toothpick in that forest. This is thanks to IUCN."

"IUCN is good! It's fine!" (Fulani women)

"Prior to IUCN we were desperate. With IUCN we have been able to organize ourselves in order to defend our interests." (village councillor)

"Now we can fly with our own wings... We can but thank IUCN" (women's credit association)

"It's the first time I see Fulani women sell lettuce instead of milk. That's revolutionary, and is thanks to IUCN."

"We heartily thank Mr Tiéro who won everyone's confidence and mobilized everybody for nature conservation."

"Say 'Thank you very much' to IUCN! We greatly thank our comrade Tiéro. We render great homage to him for having established good collaboration among the local people."

"IUCN has not brought us 'ready-to-wear'. Since we did this together, it can now continue."

"Youwarou had lost its *raison d'être*. But with IUCN, biodiversity has come back – which means that we will live in good health."

Appendix J.

SHORT BIOGRAPHIES OF THE EVALUATORS

Meg Gawler

Meg Gawler is the founding Director of *ARTEMIS Services – for Nature Conservation and Human Development*, a consulting firm specifically for the conservation and development sector: She specialises in:

- ❖ programme and project evaluations
- ❖ strategic planning
- ❖ project and programme design
- ❖ workshop facilitation
- ❖ training in project planning and project cycle management
- ❖ research, and
- ❖ photography.

As an aquatic ecologist, Meg Gawler has carried out research in fresh and coastal waters, especially in the dynamics of plankton and the functioning of ecosystems. Meg has Bachelor of Science in the conservation of natural resources and a Master of Science in Applied ecology, both from the University of California at Berkeley in the U.S.A.

She brings to evaluations more than twenty years of academic and professional experience in ecology and conservation, including links with human development. Her experience includes ten years in the Africa and Madagascar Programme at WWF International. She is particularly interested in the management of wetlands by local communities.

Ms Gawler has carried out over twenty evaluation missions, sixteen of which as the team leader or sole author. These missions involved a wide range of actors and objectives. In all evaluations, the emphasis is on a transparent and constructive approach with the intention of improving programme performance and impact. In carrying out evaluations, Meg's focus is on a humanistic and analytical process that both enhances institutional learning, and builds capacity for the programme team who are at the heart of the evaluation.

Bréhima Bérédogo

Bréhima Bérédogo was born 1 April 1954 at Kadiolo in Mali. He studied at the University of Toulouse le Mirail in France for the first and second cycles and at Université René Descartes, Paris V for his doctoral studies.

With a Masters degree in Social and cultural anthropology, Bréhima Bérédogo has taught successively from 1986 to 1995 at the Ecole Normale Supérieure of Bamako and since 1995 at the Faculté des lettres, langues, arts et sciences humaines (Faculty of literature, languages, arts and human sciences). He is a member of the faculty council, a member of the scientific committee of the faculty journal and the coordinator of the same journal. Simultaneously, he has carried out expert analyses for different partners (projects, NGOs, international organisations, State, etc.) on rural development, village land development and management, decentralization, gender, civil society, evaluations, etc.

In addition, Bréhima Bérédogo was once the convener of the teachers' union in the 1980s, and also the head of the political association CNDI that was the first to openly advocate political pluralism in Mali. He is at present a member of the APAD (Euro-African association for social change and development anthropology).