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1. INTRODUCTION

The 10th PODES orientation seeks to ensure a healthy management of environmental resources for sustained development by, among other things:

rationalizing natural resource management;

developing environmental education ;

drafting and implementing environmental plans of action at national, regional and local levels.

3.1.3 In the area of spatial planning, the

involving the populations using the participative approach as an implementation strategy

integrating forestry in a system geared towards the lasting development of the agricultural, pastoral and forestry production potentials;

decentralizing forestry planning, by relying on an increased collaboration between the [6] and the Regional Council.

The PAFS Program of Action is structured around seven priority themes:

improving the institutional framework;

the International Desertification Convention adopted in Paris in October 1994 and ratified in March 1995.

As mentioned above, the Direction de la [10] currently is preparing for a new system of the National Accounts to cover the period of 1997-2000, which ideally should cover the type of products and activities on which the project VALEURS is collecting data. It can be concluded that the results of Phase I are very relevant within the context of current policy.

3.2 Project suitability – ecological perspective

3.2.1 The overall purpose and goal of the project are appropriate in terms of ecology. The importance of natural ecosystems in development at national and community levels is increasingly recognized throughout tropical Africa. In Senegal, the natural (and semi-natural) vegetation supplies a whole range of benefits from grazing, soil fertility, wildlife habitat and water catchment, through timber and fuels, to a diversity of non-timber products. The ecosystems of Senegal are threatened by unsustainable use and by short-term climate change, which threatens the economic well being of the local population and food security. There are clear

The
[18], PROGEDE (GDS, World Bank, Netherlands, FEM)

The [19], PROMER, (

The [20] in the Kolda region, P

The [21]
PSPI, (GDS –GTZ)

The
USAID)

The project for the [23] thr
rehabilitation of deteriorated soils in the cross-border zones of M
(GDS, PNUD)

Other NGO's, such as ENDA also carry out programs in related fields.

4.4 In the University of Dakar a number of faculties have specialists in fields related to the use of wild resources. ISRA has strong research departments with representatives in the field and capabilities to handle data collection and analysis on a national scale.

4.5 At the national level, the [24] (ISE), the [25] (CSE), ISRA, the

Cooperation with the *Groupe d'experts pour l'utilisation durable en Afrique de l'Ouest*[28] (WASUSG) has not been initiated.

The UICN Sustained Use Initiative (SUI) undertook missions to support the UICN Economic Services Unit (ESU) project and TRAFFIC.

4.7 During Phase I, the program was managed by a Steering Committee (CMO) with representation by DPN, DEFCCS, and ITA. Other members include representatives from the academic community, NGO's, and ISRA and the CSE as the main partner institutions. In this way the most concerned institutions were represented within the management team, while others were 0.98 357.0019 608.58

The Seminars organized by the project have also had a positive contribution, by assembling groups of professionals from different scientific and management disciplines, with focused presentations on the findings of the program, and on seminar topics selected by the project. These seminars encourage participants to take a wider view of their specialties, and to see the broad spectrum of activities that make up natural resources management.

The large number of smaller studies undertaken within the framework of the VALEURS program has ensured that this increased capacity is not limited to only a few major partners. In this manner, the program has achieved a balanced combination of capacity building and achievement of results (see below under point 4).

2. increased capacity of local leaders' skills in the management of wild specie3134 582.6613 TmT.tTj0

Recommendation: the

7.2.3 Current trends in the landscapes and ecosystems of Senegal, as discussed in the literature mentioned in **Annex 4**, suggest that degradation of the natural environment on a massive scale is in progress. Factor

7.3 Scientific leadership

7.3.1 The program is at the forefront of applied environmental science in Senegal, and is also important in the West African region. If the program is to achieve, or even partially achieve its objectives, it will be necessary to break new ground in the application of the Phase I results to Phase II. During this process, it is inevitable that situations arise that require the development of original solutions, or changes in direction of the project. The two phases of the program are an information gathering phase and an implementation phase. However, strong scientific leadership is required throughout both phases if the program is to be successful. There needs tht

7.5 Continental Fisheries

7.5.1 The continental (non-marine) fisheries project has involved a large amount of data collection on the estuaries of Senegal, especially the Fleuve Senegal and the Sine Saloum. Data on the current status of the continental fisheries were largely lacking in Senegal, and the VALEURS project has provided a very valuable data set at a time when a new department for Continental Fisheries has just been established and interest is high. There appears to be a good opportunity for VALEURS to have an important impact on continental fisheries at a policy level, and this objective should be pursued during synthesis and in Phase II. In the Fleuve Senegal, the VALEURS project is providing baseline data that can be used to see what is happening to the fish and fisheries following a massive decline in harvests in recent decades, reported to be from over 30,000 tons down to around 10,000 tons in recent years.

7.5.2 The data collected by ISRA is a very detailed and much-needed update on the situation regarding the estuarine and riverine fisheries. Because the data are recorded by species, this is an advanced tool for monitoring the fisheries. This data set can be regarded as a baseline survey. In Phase II it should be possible to design an on-going monitoring program based on the information gathered in Phase I. We suggest that at selected fish landing points in the three estuaries, ISRA scientists work closely with local people to establish a monitoring program run locally.

7.5.3 How does the project relate to sustainable use of the resources? The river and estuary ecosystems are complex. Although techniques for studying estuarine and riverine ecosystems are well established and much of the necessary information for ecosystem-based management could be gathered, this would be an expensive and lengthy process, unsuitable for VALEURS. The Phase I approach of collecting fisheries data was very successful, and this gives an important window on the sustainability of fishing. Logically, the Phase I program could be followed up in Phase II, as a participatory monitoring project at the Collectivite rurale level.

Still in Phase I, it should be possible to produce some impressive products from this large body of work through synthesis and through collaboration with CSE.

7.5.4 During Phase II, there should be an effort to obtain more information on the rare/endemic fish species of Senegal, of which about 10 have been cited as species of concern. As an additional bio-diversity objective for fisheries in Phase II, the status and conservation of the manatee should be included. This IUCN-listed threatened species is rare and declining in rivers and estuaries throughout West Africa. It is excluded from most mammal conservation programs because its habitat is often poorly represented in protected area systems. The manatee is affected by climate, especially salinity increase in its habitat, and by interactions with humans, especial with fishermen. It is sometimes hunted, but a greater danger is drowning when manatees become entangled in fishing nets. The VALEURS project is an ideal vehicle to generate information and awareness on manatees through community monitoring of manatees, by recording manatee sightings, deaths along with data on fisheries.

Another useful focus during Phase II is on the mangroves of the Sine Saloum and Casamance estuaries, and on the sustainable h

7.6 Intellectual property rights, ownership of biological diversity

7.6.1 Biological diversity translates into genetic diversity, and for plants especially, into chemical diversity. In Senegal, this diversity is widely utilized in traditional medicine, and some medicinal plants are becoming increasingly commercialized. Senegal appears to lack legislation that would support the development of new medicines and the commercialization of traditional uses. There is a need to clarify at a national level the process for commercializing plants, the ownership of the intellectual property regarding plant use, how royalties on commercial production will be levied and distributed.

8. ECONOMIC VALUATION

8.1 General considerations

8.1.1 During Phase I, the VALEURS program has put emphasis on:

Services income derived from wild resources (in particular tourism and hunting) are felt to be an important part of the contribution of wild resources to the economy. So far there has been no attempt to quantify this contribution, beyond some data collection on hunting and visits to national parks from secondary sources. A Willingness to Pay study has been planned but was postponed since the relevant data could only be collected during the dry season, i.e. the study could not be finished before the end of Phase I. There is also mention of even park entrance fees pricing study.

These kinds of studies might not be very cost-effective. As mentioned, some qualitative and quantitative data have been collected regarding hunting and park entrance fees. Available data on hotel visits have not yet been studied, although they are available at the Ministry of Tourism. An analysis of those data linked to those on hunting and park visits may be possible in cooperation with the ministry. This would require a breakdown of the data by region and nationality. Combined with a small case study of the sector, this could produce a very rough estimate of the importance of wild resources. While such an estimate can not replace a WTP study, it would be far less expensive and the extra precision (basically only to better convince the nations policy makers) might not be needed, since the tourist sector as a whole is already included in the System of National Accounts. Less expensive shortcuts could easily give misleading results even though appearing very accurate. Since a large part of the proceeds from international tourism remain abroad and prices are subject to huge market distortions (WTP by tourists may not translate in WTP by tour operators who may have their own reasons to channel tourists to specific countries and places). Any study of WTP that does not take these distortions into account is bound to lead to erroneous conclusions. In addition there is the complicated issue of perceived safety of travel to and within different countries, with which Senegal competes for tourists.

A park pricing study, as suggested in one of the consultant/trainer reports appears a rather expensive way to go about the issue of park entrance fees. It is likely that more down to earth (and less risky) approach of trying out gradually changing prices while observing effects on visitor numbers would do the same trick. This approach, which is essentially also measuring WTP, is far simpler than a questionnaire to tourists either on entry in the country or even abroad.

An important aspect of the contribution of wild resources to the economy is the degree to which certain regions, communities, and households depend on the extraction of wild resource for their livelihood. This dependence has been defined in terms of cash income from collection, fishing, and hunting, as well as in terms of home consumption. The latter has achieved less attention than outright sales, while products not marketed at all have received even less coverage.

In general, the supply side has been given most attention in the quantitative studies. A very interesting qualitative study of the demand side gives important insights into consumer behavior and consumer preferences. This type of data is important to have a handle on the feasibility to influence the market for wild products. As input to more quantitative models, these findings are difficult to integrate with the data collected on the supply side.

The major part of all survey efforts has been directed at the process of extraction itself. Markets and consumers have received less coverage in the surveys. Because of this focus on estimation of the total production at producer level, the surveys could not cover the whole country. An alternative approach would have been to combine a market study with small and focused community studies looking into producer costs and home consumption at the producer level. This might have been a more efficient way to collect data on the economical value. The choice for98 cDo

8.2.4 There is no reporting on procedures used in the surveys, on definitions used in the field etc. Clear is that most findings are rounded figures. This introduces estimation margins that are not sufficiently discussed. In terms of volumes or weights the margins likely vary according to product, because in general people use standard procedures. The way the data look at present, large amounts are rounded differently from small amounts. Such rounding errors may or may not result in important estimation errors, especially since calculation procedures (multiplication by number of trips) tend to multiply the rounding errors. Since volumes are measured at the producer level, the likelihood of estimation errors is largest for products that are mainly home consumed.[30] While products that are rare may have large sampling variations but because they are unique the quantity and value estimations for such products could be small.

In many surveys it can be assumed that such errors are averaged out, especially when the number of products are few, but this should be investigated for wild products.

8.2.5 One way to check on th.98 0 0 10.dproducts are f

Recommendation: A data sheet should be prepared explaining the precise nature of all calculations employed to obtain the economic value estimates for the fishery sector. Separate

Table 1

	Expenses in FCFA			
Description	1998/1999	2000	2001 budget	Total
8 Case Studies (budget for consumer preference study was 16,80,000 FCFA)	824,000	2,850,000	19,980,000	23,654,000

9.3 Although the cost of external consultants to date has been relatively low, the benefit to the program could have been higher if the timing of support visits had been more adapted to program needs. This of course is a logistic problem confronting many organizations using external consultants. But if a program is supposed to be self-reliant and basically run by local institutions these institutions should be responsible for requesting support at the moment such support is most useful. There is often a tendency to treat the external consultant as an external agent, rather than as a colleague invited for a peer review, when plans are ready for implementation and could benefit from the critical opinion of outsiders.

The following example illustrates how the proper timing of support was sometimes lacking:

During a visit by an international IIED consultant discussions resulted in an advice to include amongst others questions on home consumption of households collecting wild products in the survey. This was after the actual field surveys had already started. Since the questions could be added to a module that was to be used later, the problem could still be solved in this case. However, this situation should have been avoided by better planning.

Recommendation: Planning of support in the form of backstopping or training should be made the responsibility of the target group or institution. They should ensure that they timely request for this support and training. These requests should be channeled through the programoub88 0 0 4

9.5 Training was organized by hiring consultants, some of which were from abroad. The relevance of training materials and techniques is difficult to establish in hindsight, as there was no systematic record of participant evaluations. Only in one case, the report on the training clearly suggests that the training itself had little relevance for the actual tasks of the participants. As will be mentioned below this can at least partly be attributed to a lack of explicit description of project issues.

Recommendation: Training workshops should depend on the expressed needs by the trainees. It is not sufficient for such needs to be described in broad terms. The trainer should receive, together with the TOR, a document describing the tasks for which the trainees need training and a most recent update on the current status of their task and any perceived problems with a smooth execution in the near future. It is also important that training should take place in time to plan subsequent task execution (and not while the task has been started).

9.6 In the light of the long delays in program execution especially during its early stages, the question should be posed whether the program did not over extend its possibilities. These early delays appear to have been mostly the result of logistic problems: departure of important staff at the very beginning of the program. The accomplishments of the program, in particular the fact that program has been successful in obtaining most of the data needed to estimate the economic contribution of wild resources to the economy shows that once these logistic problems were solved the program did very well. Nevertheless, at present the amount work waiting completion is considerable: analysis, writing up, and the design of the GIS database. The coming month is going to put a heavy strain on human resources and it would be best if arrangements could be made to continue some of the outstanding tasks into Phase II.

10. EFFICACY OF THE IMPLEMENTING BODY AND ITS MAIN ASSOCIATED PA

A national co-ordination body referred to as the Project Implementation Committee (or CEP) will bring together the institutions and technicians involved in the implementation of some components of the project. The Committee will meet regularly to examine the state of progress and co-ordinate the activities of partners in Sen86iEd.

Recommendation: in view of the fact that the Implementation Committee did nothe

Recommendation: Tasks should be more explicitly formulated. In general, funding of each task should depend on the delivery of proposals that relate the tasks to expected results in a more explicit way. Documents of this type should in fact contain a detailed outline of the expected outputs, with checklists for qualitative material and formatted tables for quantitative material. Each element of the plan should be related to a proper and verifiable purpose.

10.13 Currently there has been very little contact about the actual needs of the ultimate users. Since the field surveys were mostly extractive by nature, there was no process in place to relate local and regional needs for data to the current effort. As already mentioned, the Direction de la Prévision et de la Statistique should have involved from the very beginning. This involvement needs to be both at the co-ordinating at the technical level: to integrate the collected data particular attention needs to be given to aspects of definitions, limitations of the collected data, and models being used for calculations.

Recommendation: Consultations with DPS should start as soon as possible in order to involve them in the preparations of the synthesis documents and the GIS database.

10.14 Another important task is the planning of procedures to maintain the database. Databases often have a short shelf life. Data on extraction can be very misleading if treated as static, especially when pressure on the ecosystem increases because of high extraction rates. A more continuous process of data collection can also serve as a monitoring system on sustainability especially when data on the spatial distribution of extraction are taken into account. Obviously setting up such a system will have to wait till Phase II, but the actually planing of such a system is closely related to the design of the database itself (maintenance is the most frequent form of access).

Recommendation: Procedures should be formulated that arrange for proper data exchange and version control between the partner institutions. Arrangement should be made for a back up on CD-ROM of all data whenever new versions of the database are created.

Recommendation: Planning of future maintenance procedures and a regular system of data collection should be completed during the design of the database itself.

10.15 Related to these considerations is the need for procedures to govern access to the information in the database. The contracts between CSE and IUCN clearly define ownership of the data and derived products, but there should be a transparent and short process regulating access by third parties.

Recommendation: There should be a transparent and short process regulating access by third parties, specific also about costs of such access.

11. COMMUNICATION STRATEGY

11.1 The establishment of an information center for consulting publications and a wild resource database are among the key results expected from the project. The resources of this information center are constituted by data collected during the first phase.

However, the communication strategy should satisfy better-targeted needs. In the report of the project framework revision workshop organized with IIED support, it is mentioned that: "some partners expressed the hope that communication between the program coordinator and the partners will be improved. In this regard, various suggestions were formulated. Some of them emphasized the need for a greater decentralization of the coordination system.

11.2 Within a general strategy of decentralization there is however always the need fo

There is no doubt about the project input in terms of the stimulation of intellectual activity for a better knowledge of wild resources. The second phase should make it possible to extend the training program to the population.

13. TAKING GENDER INTO ACCOUNT

13.1 Even though the taking into account of gender a

The second phase during which local authorities and the grassroots populations will be more active, will require greater attention in this respect.

Recommendation: the services of other UICN projects, IIED and member structures of the Implementation Committee with an experience in implementing the participatory approach should be put to use to ensure an effective evaluation and follow-up of the compliance with the participatory approach exigencies during the second phase.

15. DEMONSTRATION PROJECTS

15.1 The second phase is expected to be devoted to the realization of demonstration projects, even if at the end of the first phase the project has no model to circulate as such.

However, discussions with members of the Implementation Committee made it possible to identify a few promising experiments already in progress that can serve as a point of departure for the formulation of realistic actions in the field.

The following examples can be mentioned:

Malicounda, for a guinea fowl breeding experiment;

Fandène, for palm tree production management

Bettenti (in the Saloum delta), for ditax production management,

Bayakh, Kayemor, for the village botanical gardens run by women and meant for the production of medicinal plants

Makon (in the PNNK periphery) for an agouti breeding project

Madinakouta (in the PNNK periphery) for an experiment in wild animal breeding by a youth association

Fatick, (Malango health center) for an experiment on the production of medicinal plants.

Practical activities in the field based on the identification of the most demanded wild products and their production zone were also suggested.

The local institution considered most appropriate to carry out the activity will be entrusted with the responsibility of implementing the project with the backing of other structures present.

16. OPPTIONS FOR PHASE II

16.1 Phase II as proposed in the original project document relies heavily on information about the ecosystems for outputs on sustainable natural resource management. The requirements for a community wild resource management plan are very detailed in the description of Phase II, and rely heavily on ecological data not yet collected. Also, increased economic benefits are expected, whereas in reality the field situation may require reduced harvests to achieve sustainability. During the re-formulation of Phase II, serious consideration should be given to the feasibility of collecting the necessary baseline information in time to formulate management plans, since a total of only 18 months is allocated to all these activities. Phase II could be redesigned with a slightly different interpretation of the project's goal to enhance the sustainability of uses of wild species in Senegal, and focus on economic rather than ecological aspects.

16.2 Basically, the most complex problems are likely to be encountered where there are a lot of conflicting uses for the land and resources, especially where there is agriculture. Complex problems may also arise if there are conflicts based on land tenure or zoning, or where resource use is partly illegal. Sustainable management of natural resources under such conditions requires careful investigation and conflict resolution. Overall, given the narrow NTFP focus of the VALEURS project, complex situations regarding natural resources management should be avoided, since it would be difficult for the program to assemble the information and expertise needed. Other situations are more tractable and more suitable for Phase II, where resources are abundant and not threatened by conflicting uses.

16.3 There appears to be an underlying assumption in the Project Document that within 5 years the project can move from information gathering, through synthesis, to actual implementation of resource management by communities. This is not realistic, especially now that the necessary information base on land use and the ecology of the resources in target field areas has not been developed. In any case, experience with the sustainable management of natural resources by communities in West/Central Africa requires a long-term commitment from the donor. Developing the necessary capacity at the local level to manage resources is difficult, and the resource-use conflicts that require resolution are often fairly intractable.

16.4 The achievement of the project Goal and the Objectives does not specifically require that the sustainable management of natural resources takes place in the field. The effectiveness of the project will be much greater if the Phase II program draws on the strengths developed so far, and on the information base from Phase I. The program is likely to be much less effective if a lot of unknown ground has to be covered in Phase II, and if the technical expertise needed is markedly different to that required for Phase I. A careful consideration of various options is needed during the design of Phase II, to improve the success of the project and the achievement of objectives.

16.5 Whatever design for Phase II will be selected, the results of Phase I will need to be safeguarded from the destiny of so many database collection efforts. In fact one might say that to engage in a major effort of data collection entails the duty to set up a system of maintenance. This aspect has as yet not received sufficient attention in the project documents and will have to be included in the planning of Phase II.

16.6 During Phase II it is better to organize database maintenance on the economic value on well structured market surveys, and to determine community selection more on questions of resource management. In our experience a community oriented approach inherently conflicts with central needs of data extraction. At the end neither will be successful, data will be sloppy because the community does not understand why certain data are needed unless they need the data for their own resource management, and community acceptance will be low. This is also why the idea of using participatory types of community assessment (PRA) during Phase I shifted towards non-participatory assessments (RRA).

16.7 Some options for achieving the project goal and objectives regarding sustainability:

Option 1: follow the project document, including details of the structure and outputs of Phase II. This option moves from socio-economic surveys during Phase I to the implementation of land-use planning and resource management in Phase II.

the allocated time, 2 years, is probably about enough to carry out the land-use and ecological surveys, and to engage the local resource-users and managers in the process. The actual interventions for sustainable management would occur after the end of Phase II, and there is no point in carrying out the preliminary work unless there is a firm commitment on the part of the donor to complete the process, through an extension to Phase II of several years duration. This option also requires a lot of expertise that has not yet been tapped by the project, nor has there been an assessment of the availability of the needed expertise within Senegal. One possibility is to join forces with another existing program that has already an ongoing participatory program in connection with natural resource management. This possibility however limits the integration of Phase I results and expertise into Phase II, since co-operation with an existing program limits the choice of participating regions and communities.

Option 2: case studies. For this option, some narrow objectives on sustainable management could be achieved by focusing simply on one or a few of the most important species, preferably in areas with few land-use conflicts.

a narrow focus does not lead to sustainable management, since other, possibly conflicting uses of land and resources are not be covered.

Option 3: community monitoring of resource extraction. This is a very useful step towards sustainable resource extraction, allowing a new kind of relationship to develop between government agencies (or NGO's) and communities, re-defining roles with agencies as providers of extension services and the communities as managers. This type of relationship is a prerequisite for moving to community-based resource management. It also enables communities to develop the expertise to understand the resources, and to see the importance of technical information. Appropriate areas for this option are the monitoring of the fisheries in the three large estuaries, and the monitoring of the production of the most important NTFP's.

this option does not lead directly to sustainable resource managemen

Option 4: focus on markets, resource extraction. This option develops the areas where the program has performed most effectively and uses expertise that has already been tapped. It does not depend for success on areas such as local governance, ecology and land-use, which are largely unknown within the context of the VALEURS project. Also, other organizations active in sustainable resource management agree that valuation and the monitoring of resource extraction is a very useful niche, and will provide very useful information that no-one else is collecting.

this option concerns economics, not sustainable management. However, it is a useful and appropriate nich

6. DPS involvement in synthesis. Consultations with DPS should start as soon as possible in order to involve them in the preparations of the synthesis documents and the GIS database.

7. **Reliability estimates.** It is necessary to present some evidence on the reliability of the estimates as obtained during the hunting and collection surveys. One way to check on quantities is volume measurement at the end of the trading chain. Careful investigation of sources and volumes in markets along the trading chain would have been useful, to establish more reliably how much of produce actually stems from the key production areas, but also to be able to test for serious discrepancies between estimations along different points in the channel.

   Since this seems not possible with the present data it could be attempted to at least test would have b

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4. **Gender.** The second phase reformulation process should explicitly include planning activities that cater for the inclusion of the gender dimension and its immediate implementation.

5. **Scientific leadership.** This needs to be maintained and strengthened in Phase II through the identification of one or a few specialists who can provide the program with more leadership in this area.

17.3 Recommendations pertaining to Phase II (ecology and bio-diversity):

1. **Rare Bio-diversity.** Any field demonstration projects should include a small component on the inventory and management of rare bio-diversity. There should also be a component focused on the management of locally rare species identified by community members, such as rare medicinal plants, and nationally protected species.

2. **National NTFP Inventories.** The project should not focus on measurements of the total national resource base for important natural products. This would be too large and costly an undertaking.

3. **Intellectual property rights.** This policy issue should be included in Phase II, regarding ownership and royalties from the development of biological diversity.

4. **Resource-poor areas.** These areas should be included for study in Phase II, to find out how the available wild resources are used, and to find the causes of resource depletion

5. **Bibliographies.** If the project decides to pursue community-based natural resource management in Phase II, annotated bibliographies should be produced on management topics not yet covered, which will need to be addressed during the demonstration projects. These topics include, but are not limited to, fire ecology, timber extraction, the charcoal industry, local fuel wood extraction, grazing on semi-natural pastures, land tenure and resource ownership

17.4 Recommendations pertaining to Phase II (economy):

1. **Home consumption and marketing characteristics in the continental fishery sector.** A qualitative study (or a small quantitative study) could be designed to estimate home consumption, losses, costs and profits of other actors in the continental fisheries sector. Another issue is how this rich database could be maintained with less detail to highlight fluctuations of the contribution of this sector to the national economy. A similar study could provide some information on the amount of home consumption of the primary producers and their labor force.

2. **Rural to rural flows.** It is the impression of the researchers that the rural to rural flows would not influence the overall resul 0 0 168 0 0 10.98 462.9924 284.2227 (y)Tj10.98 0 10.98h9 0

ANNEX 1: Terms of Reference

(Excerpt of sections common to the three consultants recruited for the phase I evaluation)

Background

In 1998, UICN launched the VALEURS Project (
) with funding support of the Netherlands Ministry for Development Cooperation. It aims at promoting the sustainable use of wild species of flora, fauna and inland water bodies through appropriate national policies, planning and investment. The project approach is based on the assumption that wild resources fare far less than agricultural production in the making of policy and decisions, whereas they form the basis of bio-diversity. The current status devolved to wild resources is due mainly to a gap in the available information about wild resources biology, ecology and above all about their economics.

At first, the approach strives to establish the importance of wild resources in relation to the household, community and country economy and to integrate the assessed value in the relevant land-use options, allocation of production inputs and investment decisions. A two-part integrated strategy was designed with local and international partners to fulfill the project's specific objectives over a five-year period. Phase I, which is due for completion in December 2001 is devoted to data collection and analysis as well as development of concepts and tools. More precisely, phase I work has an emphasis on:

It is not obvious that anthropic factors have led to a wiser use of natural resources. Research conducted during phase I of VALEURS on sustainability assessment, demand and supply may shed a light on this matter.

Objectives of the evaluation

The goal of the evaluation is to undergo an exhaustive, critical, in-depth analysis of the project conception, planning and implementation. Lessons learned, obstacles identified and potential improvements will form the basis of the reformulation of phase II current proposal.

As such, the evaluation shall:

- analyze project conception, its suitability in the sociological, ecological and policy contexts of Senegal and the West Africa sub-region
- investigate project targets and their relevance to stakeholders requirements and current NRM policies;
- examine the institutional framework governing project implementation (implementing bodies, cooperation institutions, beneficiaries, …) and draw lessons for future prospects;
- assess the extent to which the approach, activities and results have fulfilled objectives and expectations;
- question the level of efficiency of project implementation, i. e. whether the way human, financial and time resources were mobilized was commensurate with objectives;
- examine the efficacy of the implementing body and its main associated partner and the effectiveness of monitoring and evaluation mechanisms and procedures;
- produce a detailed report providing:
  - a clear understanding of the approach that prevailed, results and prospects;
  - conclusions; and
  - recommendations

Ways of achieving the objectives of the evaluation include:

- Becoming aware of information produced by the project (reading and analyzing text documents: study reports, progress reports, research reports, looking at data in different formats: quantitative, spatial and other stored in databases and GIS prototype) in addition to any relevant information on the project (proposal, list of partners, list of sites, etc).
- Briefing (IUCN staff, the Netherlands Embassy Representative, and project implementing partners)
- Interviews

Fieldtrips

Visits to partners

Debriefing (IUCN staff, the Netherlands Embassy Representative and implementing partners).

Assignments of the consultant

The consultants covenant to contribute from the specific expertise drawn on them to:

analyze project conception, its suitability in the sociological, ecological and policy contexts of Senegal and the West Africa sub-region

investigate project targets and their relevance to stakeholders requirements and current NRM policies;

examine the institutional framework governing project implementation (implementing

Debriefing (IUCN staff, the Netherlands Embassy Representative and implementing partners).

Reporting

The consultant shall fully contribute to writing the evaluation reports:

Preliminary report: a preliminary report shall be handed out prior to debriefing

Final report: 2 hard copies as well as 2 electronic copies of final report on the evaluation shall be delivered to both the Netherlands embassy in Dakar and to IUCN/Senegal country office no later than 2 weeks

Date	Activité	Institutions et personnes contacté
10-Nov-01	Writing draft report	
11-Nov-01	Writing draft report	
12-Nov-01	2nde séance de travail avec le CRODT (7:30-8:30)	M. Djiby Thiam
	Séance de travail au CSE (9-11 h)	M. I. A. Wade
	Séance de travail au ministère du tourisme (12-13 h)	M. Mbengue (Direction des Professions et Activités Touristiqu

Date	Activité	Institutions et personnes contacté
14-Nov-01	Debriefing (14:30-17:00):	
	Fin de la mission d'évaluation	
	Participants	M. Djiby THIAM (ISRA-CRODT)
		M. Cheikh Mbacké NDIONE (ISRA-BAME
		M. Alioun DIENG (ISRA- BAME
	Bailleur	M Alioune DIALLO (Ambasade des Pays-Bas)
		M. Michel TAVAREZ (Ambasade des Pays-Bas)
	UICN	M. Matar Diouf (Chargé de Programme)
		Mme Oumou K. LY (Chargé de Projet)
		Melle Fatimata DIALLO (Documentaliste)
		M. Mouhamadou Lamine MBAYE (Asistant de Projet)
	Mission	Prof. Drs. Rudo Niemeijer
		Mme Oumy Khairy NDAYE
		Dr. Duncan W. Thomas

ANNEX 3: DOCUMENTS AND DATA SETS CONSULTED

Document d'élaboration du projet (CAF2.5)

UICN SN. (Nov. 1997) Utilisation durable des ressources sauvages: document d'élaboration du projet (version française). Dakar: UICN (CAF2531)

UICN SN. (Août 1998) Utilisation durable des ressources sauvages: document d'élaboration du projet (version anglaise) . Dakar: UICN (CAF2532)

Rapports de programmation (CAF3.1)

EDWARDS, S. (mars 1998). - Rapport d'évaluation de progrès et de programmation # 1. Washington DC: SUr 0 10.3.28 Te83/98 029.60.397 556.2601 Tm()Tj10.02 0 0 1008 Tc 0.2787 Tw 10.98

Bishop, J. (April 2000) Potential inputs to the UDRSS/VALEURS proj

UICN SN. (2000). - Rapport annuel de progrès (période du 01 janvier au 31 décembre 1999) (CAF542)

UICN SN. (2001). - Rapport annuel de progrès (période du 01 janvier au 31 décembre 2000) (CAF543)

Rapport scientifiques (CAF6)

Ressources fauniques

ISRA. BAME. (févr. 2001) - Chasse et gestion durable de la faune dans les régions de Tambacounda et Kolda (CAF6530)

ISRA. BAME. (mars 2001) - Commercialisation des produits dérivés de la faune dans les marchés urbains de Soumbédioune et de l'avenue Blaise Diagne (CAF6534).

BAME. (mars 2001) - Place de la faune dans la sécurité alimentaire des communautés rurales autour du Parc NationaTjET1t

ISRA. CRODT. (Oct. 2000) - Dictionnaire des sites de débarquement du Sine Saloum en 1999. (CAF6524couv, CAF6524txt)

ISRA. CRODT. (Janv. 2001) - Estimation de la valeur économique des ressources halieutiques continentales: approche méthodologique. (CAF6526)

ISRA. CRODT. (Mars 2001) - Prix au débarquement du poisson en milieu continental, Méthodologie de collecte et premières tendances. (CAF6531couv, CAF6531txt)

ISRA. CRODT. (Juill. 2001) - Effort de pêche, captures spécifiques et valeurs économiques des débarquements de la pêche continentale dans le fleuve Sénégal et au Sine-Saloum. (CAF6543)

Ressources végétales

ISRA. BAME. (Févr. 1999) - Analyse des politiques et stratégies mises en œuvre dans le cadre de la gestion des ressources forestières de la région de Tambacounda (rapport d'étude) (CAF659)

ISRA. BAME. (Mars 2000) - Approche institutionnelle et analyse historique des politiques forestières dans la région de Kolda (1960-1999) (rapport d'étude) (CAF6519)

ISRA. BAME. (Août 2000) - Caractérisation des exploitants des produits de cueillette dans la région de Tambacounda (résultats préliminaires) (CAF6521)

ISRA. BAME. (janv 2001) - Revue des politiques et stratégies forestières en ZSP (Zone Sylvo Pastorale) (rapport d'étude) (CAF6528)

ISRA. BAME. (mars 2001) - Etude de l'organisation et des performances de filières forestières (CAF6532)

ISRA. BAME. (mars 2001) - Exploitation et valorisation des produits forestiers non ligneux dans la région de Kolda: caractérisation des acteurs de base (CAF6533)

ISRA. BAME. (Mars 2001) - Caractérisation des exploitants des produits de cueillette en Zone Sylvo-Pastorale (CAF6535)

ISRA. BAME. (juin 2001) - Exploitation et valorisation des produits forestiers non ligneux dans la région de Kolda: caractérisation des acteurs de base (Version finale) (CAF6539)

ISRA. BAME. (Août 2001) - Calcul des estimateurs des principaux résultats des enquêtes sur la valorisation des produits forestiers non ligneux dans les régions de Tamba et de Kolda (CAF6544)

DIOUF NIASSE, SeyTj10.98 0 0 10.98 2710.9182βy.E4danUA.

NDIAYE, A. (Sept 1998) - Etude préliminaire: Synthèse des travaux de recherche et d'études sur l'évaluation économique ou la contribution dans la satisfaction des besoins des ménages des ressources sauvages au Sénégal (CAF653)

ISRA. BAME. (févr. 1999 - Ressources sauvages de la région de Kolda: diagnostic participatif du 23/ 01 au 03/ 02/99 (CAF657)

ISRA. BAME. (févr. 1999) - Ressources sauvages de la région de Tambacounda: un diagnostic participatif (CAF658)

ISRA. BAME. (mars 1999) - Ressources sauvages de la région de Ziguinchor: diagnostic participatif du 24/02 au 05/03/1999 (CAF6510)

ISRA. BAME. (juin 1999) - Questionnaire #: (Caractérisation des agents de commercialisation ((Collecteur /Bana Bana) (CAF6511)

ISRA. BAME. (juin 1999) - Questionnaires: Evaluation de la Valeur (Commerciale des Produits Sauvages (CAF6512)

ISRA. BAME. (juin 1999) - Questionnaire: (Caractérisation des exploitants (CAF6513)

ISRA. BAME. (juin 1999) - Questionnaire: Grossistes (CAF6514)

ISRA. BAME. (nov. 1999) - Ressources sauvages de la Zone Sylvo- Pastorale: diagnostic participatif de 08 au 17/ 11/ 99 (CAF6515)

SALL, B. O. ; LY, C. (Juin 2000) - Rapport de l'« Etude sur les exportations et importations de ressources sauvages et leurs produits au Sénégal » (CAF6520)

ISRA. BAME. (janv 2001) - Méthodologie des enquêtes socio-économiques des ressources sauvages terrestr4 522.0014 Tm.98 0 0 10.98 70.92 360 0 10.98MC/P /AMCID 9 BDCBT/TT3 1 Tf0ges

UICN SN. (Déc. 2000). - Rapport de la 5ème réunion du Comité de Mise en Œuvre. (CAF1125)

UICN SN. (Mars 2001). - Rapport de la 6ème réunion du Comité de Mise en Œuvre. (CAF1126)

UICN SN. (Mai 2001). - Rapport de la 7ème réunion du Comité de Mise en Œuvre. (CAF1127)

UICN SN. (2001). - 8ème réunion du Comité de Mise en Œuvre. Proposition de termes de référence et plan de travail de la validation des enquêtes socio-économiques (UICN-ISRA). (CAF1128)

UICN SN. (mai 2001). - 9ème réunion du Comité de Mise en Œuvre. Proposition de termes de référence et plan de travail de l'évaluation. (CAF1129)

List of Databases

Bases de données sur le recensement des unités de pêche

Bases de données sur les sites de débarquement

Bases de données sur les prix au débarquement

Données sur les caractéristiques socio-économiques

Caractérisation des bana_banas dans la zone sylvopastorale

Caracterisation des acteurs de la filiere

Caractérisation des Exploitants

Caracterisation des exploitants dans la zone sylvopastorale

Caracterisation des bana_banas dans les regions de tamba et kolda

Chasseur

Enquetes menages

Exploitant

faune et sécurité alimentaire

Suivi des marches dans la zone sylvo_pastorale

Pharmacopée

Suivi des grossistes

Suivi de marche dans les autres regions

Tableau_menage_faune

Tableau_age_des_chasseurs

ANNEX 4: ADDITIONAL DOCUMENTS REFERENCED

Plan National d'Action pour l'Environnement. 1977. Secrétariat Permanent du Conseil Supérieur des Ressources Naturelles et de l'Environnement, Dakar. 158pp.

Ba, Amadou Tidiane (editor). Monographie Nationale sur la Biodiversité au Sénégal. Undated, 1995 or later. Ministère de l'Environnement et de la Protection de la Nature, Dakar. 82 pp.

Guide de la Diversité Biologique du Sénégal. 1991. World Conservation Monitoring Centre, Cambridge. 20 pp.