UNITED NATIONS DEVELOPMENT PROGRAMME

KENYA, TANZANIA, UGANDA

INSTITUTIONAL SUPPORT FOR THE PROTECTION OF EAST AFRICAN BIODIVERSITY

RAF/92/G31 - UNO/RAF/006/GEF

REPORT OF THE FINAL EVALUATION MISSION

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LIST OF ABBREVIATIONS AND ACRONYMS

A1-9	Project Components in Kenya	
APO	Associate Professional Officer	
AWF	African Wildlife Foundation	
B1-14	Projects Components in Tanzania	
C1-9	Project Components in Uganda	
CITES	Convention for International Trade in Endangered Species	
COST	ECHCommission for Science and Technology (Tanzania)	
CSA	Contractual Services Agreement	
CTA	Chief Technical Advisor	
DEP	Department of Environmental Protection (Uganda)	
DFB	Directorate of Forestry and Bee-keeping (Tanzania)	
DOE	Department of Environment (Tanzania)	
DSM	Dar es Salaam	
DW	Directorate of Wildlife (Tanzania)	
EIA	Environmental Impact Assessment	
EU	European Union	
FAO	Food and Agriculture Organization of the United Nations	
FD	Forestry Department (Kenya)	
FEAS	Forest Environmental Accounting Service	
GEF	Global Environment Facility	
GEMS	Global Environment Monitoring Service (UNEP)	
GIS	Geographic Information System	
IMCE	Inter-ministerial Committee for the Environment (Kenya)	
IRA	Institute of Resource Assessment of the University of Dar es	Salaam
	(Tanzania)	
IUCN	World Conservation Union	
KWS	Kenya Wildlife Service	
LVEMP	Lake Victoria Environmental Management Programme	
MENR	Ministry of Environment and Natural Resources (Kenya)	
MOU	Memorandum of Understanding	
MP	Member of Parliament	
MTR	Mid-Term Review	
MUIENR	Makerere University Institute of Environment and Natural	Resources
	(Uganda)	
NBU	National Biodiversity Unit	
NCDC	National Curriculum Development Centre	
NCS	National Conservation Strategy	
NEAP	National Environment Action Plan	
NEAs	national environmental agencies	
NEIC	National Environment Information Centre (Uganda)	
NEMA	National Environment Management Authority (Uganda)	
NEMC	National Environment Management Council (Tanzania)	
NES	National Environment Secretariat (Kenya)	
NGO	Non-governmental Organization	

NMK National Museums of Kenya

NPC	National Project Co-ordinator
NPO	National Project Officer
PLO	Project Liaison Officer
PPER	Project Performance Evaluation Report
PSC	Project Steering Committee
RNRO	Regional Natural Resources Officer (Tanzania)
SGP	Small Grants Project
SUA	Sokoine University of Agriculture (Tanzania)
TCDC	Technical Cooperation among Developing Countries
TFAP	Tropical Forestry Action Plan
TOR	Terms of Reference
TPR	Tripartite Review
UDSM	University of Dar es Salaam
UIE	Uganda Institute of Ecology
UNCED	United Nations Conference on Environment and Development
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
WCK	Wildlife Clubs of Kenya
WCMC	World Conservation Monitoring Centre (UK)
WCST	Wildlife Conservation Society of Tanzania
WCU	Wildlife Clubs of Uganda
WD	Wildlife Directorate (Tanzania)
ZCNR	Zanzibar Commission for Natural Resources
ZNCT	Zanzibar Nature Conservation Trust

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The Evaluation Team gratefully acknowledges the assistance provided by many people during the course of the evaluation. The CTA and National Programme Officers put themselves at the complete disposal of the mission and gave up much of their time to organize a very intense programme in each of the three countries, accompany the team to the numerous meetings (the NPOs), provide information, and discuss the project and project-related issues. The NPCs were also instrumental in providing materials and sharing their views with the team. The PLOs and staff of the many implementing agencies gave very detailed information and shared their views on their respective components and on the linkages created, particularly within components. Senior government officials, and selective donors provided their own views on the success of the project, as well as background information as required. Briefings were provided by the FAO Task Force and FAO and UNDP country representatives and their staff.

Special thanks is extended to all the staff of the project for their logistical, administrative, and secretarial assistance, as well as to the FAO Representations in each of the three countries for providing the team with open access to their office and communication facilities.

ABSTRACT

A final evaluation was conducted of the RAF/92/G31 "Institutional Support for the Protection of East African Biodiversity Project" in July 1996. The development objective of the project is to increase institutional awareness and capability for biodiversity conservation in East Africa. This complex project is implemented through 32 national and 5 international components. Two of the immediate objectives of the project are considered to be very successful and two had limited success. The project was very successful in providing a wide range of training in an appropriate and effective fashion, in raising awareness of mid-level civil servants and of school children, and in developing the institutional capacity to collect and analyze information on the biodiversity of the three countries. The project had limited success in integrating biodiversity issues into government sectoral planning and in planning and managing priority sites for biodiversity conservation. The project design largely ignored the institutional capacity needs for analyzing human pressures on biological resources and for developing, testing and extending solutions and alternatives to these threats. Strong emphasis was placed on increasing the capacity of the lead national environmental agencies in specific areas, but this enjoyed limited success because all three of these agencies lacked the overall clarity of mandate and political clout needed for them to be effective. The project was very effective in developing regional networks and technical collaboration and in conducting regional training exercises and workshops. Prospects for sustainability are relatively good at the levels of making effective use of the improved human resource capacity, for continued database maintenance and development, for the further development of networks and partnerships established and for continued awareness-raising activities, especially through the wildlife clubs. Future reliance on donors will be especially high for maintenance and replacement of vehicles and equipment, for biodiversity inventories and for continuing and expanding field conservation activities. The project adopted a long-term strategy and had almost no direct impact to date on the loss of biodiversity in the three countries. Future needs include: (i) the development of institutional capacity to analyze human pressures on biological resources and to develop effective strategies for diminishing these pressures; (ii) the identification and support to a range of institutions best suited for working in partnership with local communities; and (iii) clarification of mandates and strengthening of the national environmental agencies leading to effective integration of biodiversity issues into the government planning processes.

EXECUTIVE SUMMARY

Evaluation of the Project RAF/92/G31 "Institutional Support for the Protection of East African Biodiversity" (FAO code UNO/RAF/006/GEF)

I. The Evaluation

Purpose of the evaluation

This Terminal Evaluation took place from 26 June through 31 July 1996, in Kenya, Uganda and Tanzania, with several days in Rome for debriefing at the end. The purpose of the evaluation was to review the project, evaluate its impact, successes and failures with a view to distilling lessons learned that could be used in the design of future projects and programmes in related areas. The Evaluation included a review of the design and the effectiveness of the project in realizing its immediate objectives and outputs, implementation modalities, linkages developed, among others. In this context, it has also attempted to assess whether the strengthened institutional capacity of the key agencies in the three Governments of Kenya, Tanzania, and Uganda, has contributed to achieving the long-term development objective - reduction in the loss of biodiversity.

Mission composition

The team was composed of Team Leader Roy Hagen (UNDP), Barbara Cooney (FAO Investment Centre), Titus Mukiama (University of Nairobi), Cornelius Kazoora (Sustainable Development Centre, Kampala), Robert Nabanyumya (National Project Officer, Kampala) and Generosa Kamuzoora (Agriculture, Natural Resources and Environment Planning Commission, Dar es Salaam).

II. Overall success in achieving immediate objectives

Development objective of the project

"To create the institutional awareness and capability within the relevant governmental and non-governmental organizations of East Africa, so as to ensure adequate protection of the biological resources (biodiversity) of the region."

Immediate objectives

The project was very successful in achieving two of the immediate objectives, had limited success on a third and very limited success on the fourth. The overall level of success of the project can be considered to be fairly high.

Immediate Objective 2 "To increase the quantity and quality of training in all aspects of biodiversity and to improve levels of awareness of biodiversity in government."

Training has been especially successful:

- (i) A very wide range of training activities were undertaken ranging from workshops to MSc and PhD levels.
- (ii) Training activities were generally appropriate and cost effective.
- (iii) Field work for higher degrees was all done in the region, benefitting both the students and the institutions in the region, as well as contributing as inputs to the data gathering and analysis activities in the pilot areas.
- Most people trained are permanent staff of a national institution or students with good prospects of being assumed as staff members of the sponsoring institution. Most of them are returning to their host institutions.
- (v) Much of the training has been conducted regionally and has been highly appreciated. This has resulted in considerable sharing of experiences and greatly expanded networking and linkages.

The general level of awareness of biodiversity values and need for its conservation has been raised substantially in all three countries:

- (i) Support to the wildlife clubs in all three countries has been a highly effective way of reaching primary and secondary school-age children.
- (ii) Much of the awareness-raising has grown out of the multifarious activities and training undertaken by the large number of implementing agencies rather than from programmed awareness-raising activities as such. National and regional linkages developed and enhanced by the project have contributed significantly to awarenessraising.
- (iii)Much progress has been made with mid-level government technical staff. Effective methods for raising the awareness of policy and decision makers has proved the most difficult.

Immediate Objective 3 "*To upgrade the institutional capability to collect, analyze and disseminate information on biodiversity so as to further conservation.*"

- (i) The project has been very successful in supporting the creation/development of databases in both government and non-governmental institutions. Even the lead national environmental agencies have performed quite well on database development.
- (ii) Forest biodiversity and wetlands biodiversity inventories in Uganda have had quite striking success. The Uganda Forest Department is moving quickly towards direct application for the identification of priority areas and the gazetting of strict nature preserves.
- (iii)The project has strongly supported a pre-existing, informal regional forum for coordination of database and biodiversity inventory standards which has contributed significantly to enhancing the compatibility of the different databases established under the project.

Immediate Objective 4 "Within selected priority areas for biodiversity conservation, to undertake management and planning activity to enhance existing conservation capability in a demonstrative and integrated way."

GEF pilot projects were intended to develop, test and demonstrate innovative approaches for biodiversity conservation and use, and Immediate Objective 4 was to be the focus in this project for doing this. Strengths and weaknesses of Immediate Objective 4 are as follows:

- (i) The pilot areas served primarily as foci for putting newly learned skills into practice in a multi-disciplinary approach through the collection and analysis of data in real life situations. This worked quite well. Activities in Kenya and Tanzania lead to the discovery that people of wealth and power are stakeholders in some of the key issues and, hence, often impediments to changes in policies.
- (ii) Government institutions, universities, research institutes and NGOs developed linkages and collaborated closely in the field activities in the pilot areas.
- (iii)The analyses focused strongly on the biological and the physical aspects of each site, and less strongly on socio-economic and socio-political aspects needed to develop solutions and alternatives for resource users. Very little was done to involve the stakeholders in the pilot areas.

(iv) The analysis did not result in management activities or in "*practical conservation measures*", except in Tanzania, and there only in a limited way. No emphasis was placed in this project on the development and testing of innovative new approaches for the conservation and sustainable use of the biological resources.

Immediate Objective 1 "*The leading national environmental agencies (NEAs) with functional biodiversity units which have the capacity to coordinate national biodiversity issues.*"

This objective remained largely unachieved for the following reasons:

- (i) The main problem is that the NEAs themselves all lacked clarity of mandate and political clout. In each case there was confusion and overlapping authority with other national institutions, frequently compounded by lack of donor coordination.
- (ii) Biodiversity officers have been assigned in the NEAs, although few if any have been released completely from their other responsibilities in order to work full-time on the project activities None of the staff of the units were able to express a clear vision of what their mandate is or should be, or clear strategies for integrating biodiversity issues into government planning.
- (iii)The project should have been designed from the outset to give greater direction to the National Biodiversity Units (NBUs). Among the first outputs should have been the preparation of clear terms of reference for the NBUs and an awareness-raising strategy identifying targets and messages.
- (iv)In hindsight, the preparation of a National Biodiversity Strategy in each country should have been an output of the project. The NBUs and other institutions would have had a clear objective on which to focus. It would have identified priorities, defined the needs for involving other institutions, and possibly mitigated some of the institutional rivalries.
- (v) Inter-ministerial sub-committees have been created in two countries (Kenya and Uganda) and have lead to increased awareness and consideration of biodiversity concerns. A proposal for the creation of an Inter-ministerial Sub-committee on Biodiversity is under review in Tanzania by Government officials. One cannot say, however, that there is a formal process for integrating biodiversity issues into government planning and policy in any of the countries.

III. Project concept and design weaknesses

- (i) The design concentrates on the biological aspects of biodiversity conservation/protection. The problem statement contends that the biodiversity of East Africa is being depleted, but presents no analysis of how it is being depleted, who is destroying the resource and why. It does not mention extensification of shifting cultivation, of demographic growth and of poverty as major direct and indirect causes of biodiversity loss. A more balanced statement of the problem could have lead to a more problem-oriented approach that would be more focused on developing institutional capacity to develop solutions and alternatives.
- (ii) Project concept and design probably would have benefitted from a wider range of expertise.
- (iii)Agriculture, in particular, should have been included in the project design.
- (iv)Given the heavy emphasis on national institutional capacity-building versus field activities, it was probably overly optimistic to have stated, "It is expected that the rate of depletion of biodiversity will be reduced,..."
- (v) In hindsight, the heavy emphasis on the NEAs, especially for integrating biodiversity issues into government planning and for awareness-raising of government decision makers, was a design weakness. The exclusion from the project of the ministries and agencies with control over the resources and/or that have agents in direct contact with rural resource users was a serious impediment to integrating biodiversity (and environmental) aspects into development plans and policies and in effecting sustainable use of biological resources on the ground.
- (vi)One of the key objectives targeted management of priority field areas, but did not allocate resources for management nor make it clear who was to manage.
- (vii) The design did not make allowance for adequate resources for project management/administration. The CTA was therefore compelled to spend a significant amount of his time and energy on administrative issues.

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IV. Project management

There was broad, general satisfaction with FAO management of the project. Specific points include:

- (i) Procurement by FAO was handled quite efficiently. Delays were reasonable and quality of equipment procured was generally high.
- (ii) Overall, the level of satisfaction of the short-term consultants fielded by FAO was quite high.
- (iii)The services and dedication of the CTA to the project were of exceptionally high quality; the technical and administrative competence of both the NPOs and the support staff, as well as their enthusiasm and commitment were project strengths.
- (iv)The use of the Contractual Services Agreements (CSAs) was an innovative, effective means of managing/disbursing funding to national and international agencies in most cases. It was also an effective means of making the institutions responsible and accountable for the implementation of their components.
- (v) FAO accounting is done by line items and cannot be directly attributed to the 32 project components or to a specific country. This has made it difficult for the CTA and the participating countries and institutions to know how much money has been spent and how much remains in the budget for each component. Especially over the past half year as the project draws to a close, this lack of up-to-date information has made it increasingly difficult to manage the project.
- (vi)FAO has provided technical support to the project through a Project Task Force, as well as through the CTA's personal contacts with other divisions. The project could have benefitted more from the full range of technical expertise available in FAO, not only from the forestry sector, but also in agriculture, agro-forestry, development support communications, etc.

V. Sustainability

- (i) The enhanced capacity of the NEAs is quite tenuous.
- (ii) The project has been paying significant portions of the costs of operating the offices of two of the NEAs (NES and NEMC), and it is not clear whether the respective governments have allocated, or will allocate, the necessary budgetary resources to cover the rental and operating costs when the project ends.

- (iii)The operations and recurrent costs budgets of all three governments are very minimal. In particular, their ability to operate and maintain, let alone replace, vehicles supplied by this project, will be very problematic. The government of Tanzania has recently sold most of their vehicles, because they cannot afford to operate them.
- (iv)Most people trained¹ will remain in place and are using their new skills, or will be assumed by their sponsoring institution. How long they remain will continue will depend on future opportunities/needs for their skills, on competition from the private sector, NGOs and bilateral donors that offer better pay and incentives, and, within government, on the extent of posting to unrelated positions.
- (v) Most people are very optimistic about continued regional collaboration in this field.
- (vi) On both national and regional levels, linkages have developed among government agencies, universities, research institutes and NGOs as a direct consequence of project activities or indirectly as a positive spin-off when people saw the benefits to be derived from collaborating. Many of these linkages have good prospects for continuing precisely because of the perceived benefits.
- (vii) Capacity for biodiversity inventories has been built, but inventories themselves are almost completely dependent on donor funding. It does not appear as though any funds have been allocated by the institutions themselves for monitoring and updating of the inventories.
- (viii) Databases will probably be sustained relatively well in NGOS, universities and institutes. They may be more tenuous is the NEAs, especially in Kenya and Tanzania.
- (ix) Awareness-raising activities will probably be continued by the national and international NGOs, particularly the wildlife clubs, while those of the NEAs are more tenuous.

¹ The main exception is MUIENR which has very few full-time staff positions. Seven people were trained at the MSc and PhD levels, and it is unlikely that MUIENR will be in a position to absorb or retain them.

(x) The pilot field activities will not be continued after the project ends unless other donor support is found.

VI. Expected impacts of the project

- (i) Awareness of biodiversity values/conservation needs have been substantially increased. Momentum has been built.
- (ii) Regionalism has been considerably strengthened.
- (iii) The capacity for biological resource inventory and analysis has been considerably increased.
- (iv) The capacities of the universities have been significantly enhanced, and biodiversity aspects are being addressed in existing course offerings and may be incorporated into revised curricula.
- The project has succeeded in bringing together a wide (V) range of national and regional institutions - government agencies, universities and research institutes, and NGOs - many of which have not collaborated with each other in the past, for joint training. They have cooperated closely at field level in data collection, as well as in the analysis of the data collected and informationsharing. Before the project started, institutions were not aware of biodiversity or where to find general environmental information. As a result of the project, there is widespread knowledge about what information exists and which institution holds it, although actual sharing of the information still requires work. It is expected that these linkages, particularly those that grew out of collaboration in setting up the databases, and the knowledge gained will continue after the project ends.
- (vi) The project supported the Forestry Department/Kenya Wildlife Service Memorandum of Understanding through the provision of joint training. It is probably the first of its kind to integrate technical and operational aspects. The result has been the instillment of a greater sense of responsibility in the forest guards and game rangers and increased collaboration. It has proved to be an innovative approach to forest management and is expected to lead to a reduction in destruction. In the light of its success, both the Forest Department and KWS are endeavouring to establish new partnerships and extend the MOU to other institutions; collaborative arrangements are now being worked out with NMK. It is expected that

cooperation between these institutions will continue to grow.

(vii) Although there was no baseline or monitoring system established, there has probably been almost no direct impact of this project on the loss of biodiversity in East Africa. Even in the priority pilot field areas, the immediate impact has probably been small to date (negligible). Local empowerment of communities in Zanzibar over their fisheries resources and the reported "end" of dynamiting of their reefs through villager interventions is one of the few clear, positive changes in resources use.

VII. Lessons learned

- (i) One can't expect to build effective government coordination through government institutions that lack clarity of mandate and political clout. It is difficult to strengthen the institutional capacity of an organization that is politically weak, not well funded, has insufficient staff, a low acceptance level and no enforcement capabilities.
- (ii) Serious problems have resulted from the lack of donor coordination in the support of NEAs, NEAPs, and other planning/strategy documents.
- (iii) The development of effective strategies for raising the awareness of higher level government decision-makers and politicians can be problematic. The role of government agencies like the NEAs can be constrained by hierarchical, bureaucratic procedures. Also, people of power and influence with political clout are sometimes part of the problem, and may use their political influence to restrain the awarenessraising function of government agencies.
- (iv) The present political situation in East Africa presents a highly unique opportunity for furthering regional collaboration on environmental and biodiversity issues.
- (v) The development of effective strategies for biodiversity conservation must balance biological priorities (based on endemism, species richness, etc.) with analysis and prioritization of the threats to biodiversity and their causes. Strategies must lead to solutions and alternatives to the unsustainable use of biological resources.
- (vi) Strategy development will require much more emphasis on the collection and analysis of socio-economic data, as well as on stakeholder participation in the process of developing solutions for conservation and management of the biological resources. One must spatially define what

the pressures on the biological resources are, who are exerting the pressures and why in order to develop effective strategies for developing sustainable systems of resource use by farmers, herders, fishermen, woodcutters, etc.

- (vii) Expectations about the timely start-up of the project were unrealistic. Governments should have been ready to receive the project; office space should have been allocated and counterpart staff designated. In the future, prerequisites and government commitments should be clear from the outset and precisely indicated in the Project Document.
- (viii) The project was too complex to be administered by only one full-time international expert (the CTA). The second post (P-4 Training Expert) should have been filled as soon as the 1993 Tripartite Reviews approved its establishment so as to allow the CTA to focus his attention more on technical issues rather than on administrative and financial matters.
- (ix) Donors have different priorities (that are not necessarily the same as those of the government) and have championed, even created, different, parallel environmental agencies in the three countries. This has significantly undermined the authority of the lead environmental agencies. A greater degree of donor coordination is required.
- (x) The design and implementation stages could have benefitted from a greater range of technical expertise.
- (xi) Capacity-building is a long-term process, and four years is too short a period to show significant results. The effect on the reduction of biodiversity loss will not be evident in the short run, but the capacity that has been built provides key institutional components of what is needed to conserve biodiversity better in the future.
- (xii) The project has encountered a series of financial setbacks (appreciation of the Kenya shilling, unexpectedly high cost of health insurance, increase in professional and general staff costs, addition of a P-4) which have had negative repercussions on the project activities. Unlike other donor-funded projects, the budgetary limits of GEF-funded projects are immutable. Furthermore, the standard UNDP budget format does not allow for contingencies to absorb these shocks. Consequently, the only revisions possible were to scale back project activities. There is a clear need for uncommitted

resources and contingency funds given the inflexibility of the GEF budget limit.

- The project has been a learning process. Biodiversity (xiii) is a new concept, and one has to know what it is before one can coordinate it. It is evident that in the design of the project biodiversity was equated with biology, and the focus was consequently on the biological aspects. It is now clear that biodiversity conservation goes far beyond biology and includes the resource users, their societal and cultural frameworks, and their economic production systems. Participation of these stakeholders will be essential. As aptly summed up in one of the workshops, the project has identified the track and the goal. It's taken three years to get there, but the people are now trained and in place and ready to start the project.

VIII. Recommendations

Future priority areas for intervention

- (i) Future projects/programmes for biodiversity conservation in East Africa should consolidate and build upon what has been accomplished by the project in order to reduce the pressures on specific, priority biological resources in the field. Strengths to build upon are the capacity to collect and analyze data on biological resources, the multi-sectoral, GIS-based database capacity that has been developed, the human resources that have been trained, the cross-sectoral national and regional networks and linkages that have been developed, the awareness that has been built, and a general desire to apply these new skills to real field situation.
- (ii) Related to the above recommendation, future field efforts for biodiversity conservation in East Africa should focus on recognized priority sites that have already been identified either through the project itself or through various strategies and action plans (see Section 2.4 for information on the biodiversity priorities of East Africa). These biological priorities should be refined over time using the inventory and database capabilities developed by this project and should be balanced with an analysis and prioritization of the threats to these sites.

(iii) Community-based participation should be a key element of field activities.

- (iv) The integration of biodiversity concerns into national development planning and policies is dependent on the political will of the government authorities. Efforts should continue to be made to develop and implement effective strategies to raise the awareness of high-level decision-makers of the importance of environmental management and biodiversity conservation.
- (v) A greater awareness of wetlands as a resource has been achieved. Support for national wetlands policy development is needed in Tanzania and Kenya. The focus in Uganda should be on policy implementation and on field level wetlands conservation and management with close involvement of local communities. Similar efforts should follow in Kenya and Tanzania once an appropriate national wetlands policy has been developed.
- (vi) The continued use of public funds for the conservation of biodiversity needs to be justified. The project has raised the awareness of environmental and natural resource economics as a means of valuing this natural capital. With a minimal level of resources, a strong interest in the economic analysis of natural resources has been generated, but adequate expertise has not been created. Training in this field should continue, and economists in the planning and finance ministries should also be targeted.
- (vii) One of the national workshops (Uganda) strongly recommended that assistance be provided to develop national capabilities to implement the Convention on International Trade of Endangered Species (CITES). Training of customs officials and the preparation of a manual on endangered/protected species (such as is reportedly under preparation in Madagascar) which could help the customs officials in the ready identification of animals were among the interventions proposed.

Institutional and policy development

(viii) Governments need to resolve questions of overlapping mandates of national institutions charged with coordinating environmental/biodiversity issues and must provide these institutions with strong, legal foundations where this is lacking. (ix) Long-term biodiversity conservation will require a mix of interventions - institutional capacity-building, field activities, institutional and policy reforms, and an appropriate legal framework. The mix will vary from country-to-country depending on their own specific circumstances. All three countries should move quickly to develop national biodiversity conservation strategies,

- and donors should support these efforts. Strategies should define priorities from the biological perspective and from the socio-economic perspective of human pressures on the resources. The problem statement should address the linkages between demographic growth, extensification of agriculture and poverty and the loss of biodiversity. Strategies should be problem-solving oriented, seeking solutions/alternatives to the causes of the loss of biological resources. Institutions should respond to, and policies, technologies, etc. should be a function of, the threats to priority biological resources and the strategies developed to address these threats. In elaborating these strategies, countries should take advantage or be cognisant of trends, such as: reduced aid flow, improved regional cooperation in the area of environment, private sector development, decentralization, etc.
- The identification of the complement of institutions that will be needed to effectively conserve biodiversity should be a key component of national biodiversity strategies. Strategies should define the roles and responsibilities of all institutions involved and should identify weaknesses where further institutional capacity building will be needed.
- A critical need for biodiversity conservation is to identify and support appropriate institutions that can effectively intervene at the local level to work in partnership with communities to test and extend sustainable uses of biological resources and to develop economic alternatives to destructive pressures on biodiversity. The choice and support of such institutions must be worked out in the evolving context of decentralization and increased empowerment of local communities and lower levels of government. Linkages with central institutions supported under the current project will need to be developed. An appropriate mix of governmental and nongovernmental institutions will be needed. Donor support should be performance-based increasing support over time to those institutions most effective in diminishing pressures on the resources.

Regionalism

(x) Future efforts should continue to build and strengthen regional linkages and collaboration between the national institutions, but should not create new, regional institutions. Such cooperation in East Africa in the area of environmental management and biodiversity conservation is particularly effective because the countries form a mega-biodiversity region and either share, or have in common, a variety of ecosystems. The countries should continue to work together on issues of mutual concern, and share and learn from each other's experience.

- The evaluation team believes there will still be major advantages in a regional approach in the future as emphasis switches to field activities and that these advantages are not necessarily dependent on the activities being focused on selected field sites located in transboundary areas. On the contrary, wherever there are common ecosystems, common threats, and/or common training needs among the three countries, there will be advantages in regional exchanges of experiences and expertise and sharing of training resources. Transboundary sites may present especially difficult complications to an already highly challenging situation. Given the present lack of proven strategies for diminishing human pressures on biological resources, it might be best to avoid such undue complications at this point unless there is a pressing need for action (e.g. Lake Victoria).
- (xi) The East Africa region could benefit, in a cost effective manner, from the special strengths and resources of particular national institutions in the area of environment and natural resources. The development of certain national institutions into centres of excellence within the region should be supported. Candidates include the National Museums of Kenya, Wildlife Clubs of Kenya, the Wetlands Programme in Uganda and the Forestry Department at Sokoine University of Agriculture in Tanzania.

Training

(xii) Training needs should be systematically assessed and should be a function of national biodiversity conservation strategies, the institutions involved in their implementation and the targeted roles and responsibilities of these institutions and their staff in relation to their present capacity. The three countries highly appreciated the training provided through short courses tailored to meet specific needs.

Enhance project implementation

- Use of professionally facilitated, team building (xiv) workshops should be employed on future biodiversity conservation projects involving a multiplicity of outputs, components and implementing agencies. At start-up, such a workshop should review the higher levels goals and objectives to develop a common understanding, should review and refine strategies for achieving these objectives and should analyze and refine the roles and responsibilities of each implementing agency to better work as a team toward achievement of goals and objectives. It is also a useful tool for mitigating conflicts between institutions. The use of independent professional facilitators may also be used during project execution to address particularly difficult issues/conflicts that may arise between agencies.
- (xv) CSAs were an innovative and effective mechanism for disbursing resources and endowing national institutions and NGOs with responsibility and accountability for providing services and producing specified project outputs. The modalities for the drawing up of the CSAs should be fine-tuned to be more efficient, and greater use of this mechanism should be used in the future.

Donor co-ordination

(xvi) Greater donor collaboration is required in the area of environment. Efforts should be made to avoid wasting scarce human and financial resources by supporting or creating rival national institutions which invariably only weakens the authority of the "lead environmental institution" by lowering the degree of acceptance by others of its lead role.

1. INTRODUCTION

1.1. Purpose of the Evaluation

This report presents the findings of the final evaluation of the Institutional Support for the Protection of East African Biodiversity Project (RAF/92/G31). This project was one of the first projects to be funded anywhere in the world under the GEF Pilot Phase and the first to become operational in Africa. As it is one of the first GEF biodiversity conservation projects to come to term, there is a particular level of interest in how well this project has performed and in what lessons can be learned from the experience.

Terminal evaluations normally serve primarily to distil lessons learned that can be used for the design of future projects and programmes in related areas. The Terms of Reference (TOR) for this evaluation are presented in Appendix Α. A final project evaluation was foreseen in the project document and was budgeted for, but no purpose is specified therein. The most pertinent parts of the TOR state that "A Terminal Evaluation allows a closer look at lessons learned This provides a mechanism where the GEF.... can evaluate . . . the success and failures of this project so as to improve design and implementation for similar projects in the future. This is seen as particularly important at this time when the East African Region has asked GEF and UNDP to prepare a second Regional Biodiversity Project."

The evaluation team members all agreed that this stated purpose is fully appropriate and presented the purpose of the evaluation in this way during all of the meetings and workshops that were conducted. The team was therefore surprised towards the end of the evaluation to come across a memorandum in the project files in Dar es Salaam from the Monitoring and Evaluation Co-ordinator in the GEF Secretariat to UNDP providing comments on the draft TOR for this evaluation. The final point of the memorandum is entitled "Specific Recommendations" and states:

"This is a terminal evaluation, which in our view should not include assessments of 'a set of specific recommendations for future East African biodiversity projects' (7)..... The recommendations should in our view be restricted to the present activities." As all of the project activities were drawing to a close as the evaluation was being conducted, this recommendation seems irrelevant. Furthermore, the team could see little point in conducting a terminal evaluation of this project if recommendations for future programming in biodiversity conservation are not made. The Mission has included recommendations for future East African biodiversity projects as specified in the TOR.

1.2. The Evaluation Team

The team consisted of a representatives of UNDP, FAO and of the three East African countries. The UNDP representative and team leader, Roy Hagen, has worked throughout much of Africa on natural resource management and conservation, served as team leader on a biodiversity conservation institutional capacity-building project in Madagascar, and has worked on six other project or programme evaluations. FAO was represented by Barbara Cooney, a staff member in the Investment Centre with experience in formulation and appraisal of regional and national technical assistance projects in Africa and familiarity with GEF and UNDP criteria, policies and procedures.

The three East Africans on the team were each selected by their government and contracted by the project. Kazoora Cornelius is an economist from the Sustainable Development Centre in Kampala and has worked as a consultant for many different donor-funded activities. He was unavailable during the final week of the evaluation and was replaced by National Project Officer Robert Nabanyumya. Professor Titus K. Mukiama is from the University of Nairobi. He had previously worked for the project as a consultant. The Tanzanian team member was Mrs. Generosa K Kamuzoora, Director for Agriculture, Natural Resources and Environment in the Planning Commission in Dar Es Salaam.

1.3. Evaluation Methodology

The TOR for the evaluation were drafted and commented on by project staff, implementing agencies, FAO, UNDP, the GEF Secretariat and the evaluation team leader. The main elements of evaluation methodology were defined by the TOR. The details were worked out by the evaluation team itself. The evaluation methodology includes two aspects that are fairly unique. First, the three nationals on the team did not participate from beginning to end. Second, workshops were used as an evaluation tool.

The evaluation was conducted in East Africa between 26 June and 27 July 1996. It began with a team planning session on 27-29 June in Nairobi before splitting up. It was attended by all team members except the one from Tanzania; the original person designated to represent Tanzania became gravely ill just before this planning session and was later replaced by Mrs. Kamuzoora. The evaluation of each country programme was conducted during three consecutive weeks, one week in each The country programmes were evaluated by the team country. member from that country working with the UNDP and FAO representatives on the team. The Kenya evaluation was carried out during the week of 1 July, Uganda during the week of 8 July, and Tanzania the week of 15 July; national workshops were held on the Friday the team was in each country. The full team was reunited on 21 July and conducted a regional workshop in Dar es Salaam on 22 July. The remaining days until 27 July were dedicated to a full team review of the overall evaluation, concentrating on key findings and initial write-ups of the immediate objectives.

Team planning

The initial team planning sessions included the following points:

- Overall briefing by CTA;
- Sharing of team member backgrounds and evaluation experience;
- Review of TOR and development of a common understanding of tasks to be undertaken;
- Definition of roles and responsibilities of each team member;
- Preparation of a draft table of contents for the evaluation report and tentative assignment of sections to each team member;
- Identification of key documents that each team member should have and read;
- Discussion and development of strategies for conducting the country programme evaluations and both the national and regional workshops.
- Preparation of guidelines for conducting effective interviews.
- Review of timing, logistics, administrative concerns, computer/word processing capabilities of each team member, etc.

Evaluation of national programmes

The methodology used for each country programme evaluation was very similar in each country:

- Monday through Thursday were taken up by nearly back-to-back meetings/interviews with implementing agencies, both national and international as well as the UNDP and FAO representatives and selected donors. Introductions and interviews were lead by the national team member, but all members present participated in posing questions. Questions centred on asking the staff from each component to evaluate their achievements in comparison to objectives/outputs/activities specified in the Project Document, Inception Report and/or Contractual Services Agreement; information was sought on perceived successes and failures, problems and constraints encountered and measures taken to overcome them, and lessons learned.
- Planning for the national workshop was done by the three team members on Thursday afternoon or evening and the national workshop was conducted on Friday.
- The three team members reviewed together the results of the week's evaluation seeking to define key findings and points that the national member would need to follow up on after the departure of the UNDP and FAO representatives.
- The UNDP and FAO representatives would travel on Sunday to repeat the cycle in the next country.

Usefulness of the workshops as an evaluation tool

Special attention is given to the workshops because they are not commonly used as an evaluation tool. All of the implementing agencies participated in each of the national workshops. The TOR for the evaluation puts an emphasis on self-evaluation. The evaluation team sought to use the workshops as a forum for the participants to evaluate the projects. The principal workshop technique used was plenary, guided discussions around a framework prepared by the evaluation team. Discussions were facilitated by team members, primarily the national members, but the team members sought to remain neutral is the discussions.

The national workshops were organized around four primary themes - coordination and networking, training and awarenessraising, research and inventories and, finally, field activities. The facilitators attempted to get the participants to evaluate each theme and component in terms of their success in contributing towards achievement of the project's development objective and its four immediate objectives. The regional workshop followed a similar format but was modified to concentrate on regional aspects and overall strategies for biodiversity conservation.

The principal points that can be made about the use of the workshops are the following:

- The workshop format works best for positive aspects of the project, and less well for aspects that were less successful. Institutional and hierarchical dynamics make it relatively difficult for individuals to be openly critical of other institutions and individuals in a workshop setting.
- The success of a workshop as an evaluation tool is highly dependent on the skills, tact and natural abilities of the person(s) facilitating the workshop. Assigning such a task to someone with no experience and no training is a relatively high risk undertaking. In the hands of a natural communicator with good training and experience, it can be highly effective.
- The evaluation team found the workshops to be moderately useful for this evaluation.
- There was probably a significant benefit for the participants in the workshops that was independent of their value as an evaluation tool. The workshops served to clarify or allay concerns participants may have had about what other components were saying about them to the evaluation team. Also, the emphasis on evaluation of themes and components in relation to the overall project objectives helped clarify individual roles within the overall "big picture" strategies of the project.

Constraints faced by the evaluation team

The team encountered the following constraints in performing the evaluation:

- The sheer number of components (32 in total) to be interviewed. Back-to-back meetings left very little time for the team to read the numerous background documents, strategize together beforehand on how best to conduct each interview, or share impressions immediately following each interview. - The fact that each national member did not participate in the evaluation of the national programmes in the other two countries made it very difficult for them to participate in the write-up of the overall report which required a synthesis of the experiences from all three countries. They lacked the perspectives of the UNDP and FAO representatives on the team. Furthermore, only the team member from Kenya had sufficient time to draft a report on the national programme prior to the final week in Dar es Salaam. Working in collaboration with his eventual replacement, the team member from Uganda only completed a partial draft and was not able to rejoin the team for the final week of report writing in Tanzania. The Tanzanian team member had almost no time to write up her section before going into the final week of regional workshop and team synthesis. Only one of the four national team members had word processing skills.

The UNDP and FAO representatives of the team ended up redrafting all sections of the report that were initiated in Dar es Salaam. Discussing the key findings of the evaluation was by far the most productive time spent together as a team. The UNDP and FAO representatives have tried to remain true to the team's consensus on key points in drafting/redrafting sections of the report.

2. THE PROJECT AND ITS IMPORTANCE

2.1 Brief Project Overview

The project "Institutional Support for the Protection of East African Biodiversity (Kenya, Tanzania, Uganda)" was designed for financing under the Pilot Phase of the Global Environment Facility (GEF). It has a budget of US\$ 10 million, a duration of four years, and became operational in October 1992, making it the first GEF project to be started up in Africa.

The overall development objective of the project is "to create institutional awareness and capability within the relevant governmental and non-governmental organizations (NGOs) of East Africa so as to ensure adequate protection of the biological resources (biodiversity of the region)". Biodiversity refers to the diversity of plants and animals at the genetic, species and habitat or ecosystem levels. The project aimed to achieve this objective through building and strengthening the capacity of key environmental agencies, universities, and NGOs to deal with the new theme of biodiversity conservation. The strategy adopted was to provide institutional support through education, in-service training, and awareness-enhancing activities and complemented by on-the-ground conservation activities whereby the training would be put into practice.

Project design provided for improved coordination of biodiversity conservation activities within each country through the establishment or support of existing biodiversity units housed within the leading environmental agencies within the three countries, and for enhancement of regional cooperation through support to awareness-raising, training, and information-sharing activities in which all three countries participated.

FAO is the Executing Agency of the project, although most activities were actually implemented by government institutions, parastatals, universities and other research institutions, NGOs, or another U.N. system organization through Contractual Services Agreements (CSAs). CSAs were used to endow these institutions with primary responsibility for producing the multifarious project outputs. A Chief Technical Advisor (CTA), based at the project headquarters in Dar es Salaam, Tanzania, is responsible for the overall coordination of the project, and particularly for promoting regional cooperation. Project offices were also set up in Nairobi, Kenya and Kampala, Uganda, each staffed by a National Project Officer and support personnel to assist the CTA in the day-to-day activities with respect to the technical and administrative management of the project in that country. Α National Project Co-ordinator was designated in each country to act as the focal point national counterpart. National Project Steering Committees are responsible for ensuring the coordination and integration of the project activities, as well as for monitoring the project to ensure the timeliness of the implementation of activities and the quality of the outputs. The annual Tripartite Review - a regional exercise in which the three countries, UNDP, and FAO participate examines the implementation of the project as a whole.

The project concept and design is reviewed in section 3 below.

2.2 Importance of the Project in the Context of GEF

East Africa represents one of the most unique biotic regions of the world, containing a wide variety of ecosystems and a rich diversity of plants and animals, many of which are endemic. Although the exact rate has not be estimated, primarily due to the lack of sufficient and accurate data, this unique biodiversity of global significance is considered to be disappearing at an alarming rate. The project met both the GEF Pilot Phase generic criteria and the specific criteria of the focal area on the conservation of biological diversity of global significance.

The project aimed to develop the capacity to manage and conserve ecosystems, species, habitats, and genetic diversity unique to East Africa through strengthening national capacities, both institutions and human resources. In the light of the plethora of donor activities in the area of environment (primarily wildlife), the project focused on forests and wetlands, areas which were not attracting significant governmental or bilateral investment and which required additional funds in order to attain adequate conservation standards.

One of the major objectives of the GEF Pilot Phase was to test and demonstrate innovative approaches and techniques to benefit the global environment. The project sought to develop innovative approaches on two levels: first, through building the capacity of a wide range of appropriate indigenous governmental and non-governmental institutions; and second, through undertaking management and planning activities to enhance existing conservation capabilities in a demonstrative and integrated way. Although the approaches to biodiversity conservation embarked upon by the project may not be completely new, the project was very successful in the former and only moderately successful in the latter. It stimulated creative linkages and encouraged cooperation among the different institutions involved in its implementation both on a national and a regional level - institutions which had never collaborated in the past. A review of the management and planning activities at field level is found in section 4.2.4 below.

With regard to the larger context of GEF, the project contributes to conserving ecosystems, species and habitats considered to be of global significance. In addition to strengthening the capacity of national institutions to develop conservation and management plans, it has conducted resource inventories of the forests and wetlands, although varying in extent from country to country. In Uganda, for example, the project has carried out inventories in all the forest reserves of more than 5,000 hectares with a view to creating strict nature reserves representative of the ecosystems in the country. Prior to the project, wetlands were neglected or their importance under-estimated in Kenya and Tanzania; efforts are now being made to development national wetlands policies in both countries.

The project fell short in one area of importance to GEF involvement of the local communities and the users of the resources. This aspect is covered in section 3 on project design and section 4.2.4 below.

2.3 Importance to UNDP's Regional and Country Programmes

In all three countries, one of the key areas in which UNDP has focused its resources during the current Country Programme (that is, the Sixth Country Programme for Kenya, the Fifth Country Programme for the United Republic of Tanzania, and the Fourth Country Programme for Uganda) is natural resource and environmental conservation. Human resource development and capacity-building, participatory approaches and the devolution of responsibility to NGO, private sector, and community level are important elements of UNDP's efforts to promote sustainable development. UNDP is furthermore striving to play an increasingly important role in policy dialogue, which includes the establishment of information systems and databases, encourages the use of Technical Cooperation among Developing Countries (TCDC) modalities, and promotes the development of science and technology.

This GEF project, with its focus on strengthening the institutional and human resource capacities of the governmental, parastatal, and non-governmental institutions and the promotion of regional collaboration for the purpose of ensuring adequate protection of the biological resources of East Africa, certainly addressed many of the UNDP priority concerns. Through the creation of National Biodiversity Units that would be responsible for the coordination of biodiversity issues across sectors, the project aimed to integrate biodiversity and environmental concerns into the national development plans and processes. The degree of success in achieving these objectives is discussed in section 4 below.

The Evaluation Team was not able to obtain detailed information on the level of resources allocated by UNDP to natural resource and environmental management interventions, but found that it varies from country to country. With the exception of the GEF Small Grants Programme, which is quite substantial in Kenya, UNDP is not presently implementing any GEF-funded **national** biodiversity projects in any of the three countries. A regional project, however, for the protection of the biodiversity of Lake Tanganyika, with a budget of US\$ 10 million, recently became operational.²

This is one of UNDP's largest projects, either national or regional, in East Africa. While the UNDP Offices clearly recognized the importance of the project and of GEF as a funding source, it did not appear to the Evaluation Mission that they were very familiar with the technical issues or engaged in monitoring the project, beyond participation in the National Steering Committees and Tripartite Reviews. In at least one of the countries, nationals involved in the project asked the Evaluation Team to explain the role of UNDP. A greater familiarity with this project, which appears to be of considerable importance in the area of biodiversity conservation and environment in general in the three countries, might enhance UNDP in its role of donor coordination and mobilization, as well as in future identification and formulation of projects for GEF funding.

2.4. Regional Importance for Biodiversity Conservation

The highest level objective of the project is biodiversity conservation. This leads one to question the relative importance of biodiversity in East Africa, in terms of species richness, endemism, habitat diversity and similar criteria. Logically, one would have expected the importance of the biodiversity of this region to have been a major consideration in the design of such a project. This question, however, is scarcely addressed in the project document.

The project has since done a very good job of analyzing and, to a certain extent, prioritizing the biological resources and has made a convincing argument that the biodiversity of East Africa is both very important in the African context and globally significant in terms of species richness, endemism and habitat diversity. Some of the key points made are the following:

- At the macro level, East Africa is found at the junction of the following major biogeographic regions:

² World Bank biodiversity projects in East Africa funded by GEF include: the Lake Tana project in Kenya (US\$ 6.2 million); the Bwindi National Park project in Uganda (US\$ 4.0 million); and the recently approved Lake Victoria project with a budget of US\$ 70 million, of which US\$ 35 million is from GEF).

- the semi-arid and arid Somali-Masai;
- the savanna Soudanian;
- the wooded (miombo) Zambezan;
- the forested Guinea-Congolian.
- Priority areas for biodiversity conservation in East Africa are the following:
 - the forest of the Eastern Arc Mountains of Kenya and Tanzania;
 - the Coastal Forests of Kenya and Tanzania;
 - the forests of the Albertine Rift of Uganda and the Northwest tip of Tanzania;
 - the dry, closed, evergreen forests found in isolated forests in all three countries;
 - swamp forests;
 - coral reefs and associated communities;
 - the three Great Lakes with their high species diversity;
 - the grassland savannas with their unique concentrations of mammals;
 - the Rift Valley Soda Lakes with their waterfowl and other wildlife.

This list would make excellent input for the design of future biodiversity conservation efforts for East Africa.

Each of the three countries has at least two of the top three rankings for all African countries based on the number of species per unit area for the categories of mammals, birds, reptiles, amphibia and plants. The geomorphology and the great altitudinal differences of East Africa have lead to the evolution of typically higher levels of species diversity than that of the broad, flat, homogeneous areas of West Africa.

3. THE SOUNDNESS OF PROJECT CONCEPT AND DESIGN

3.1. Historical Overview of Project Design

A brief understanding of the origins of the project is very helpful in evaluating its design. When the GEF Pilot Phase started in 1991, UNDP decided they wanted to have an East African project in the focus area of biodiversity conservation. It was perceived at the time that the criteria for GEF funding would not permit more than one national pilot project per country. The World Bank quickly announced national projects for Kenya and Uganda. It was then decided to design a regional project for East Africa. The choice of a regional project for East Africa (versus national projects) seems to have been made primarily for this administrative reason rather than for a perceived need for, or advantages of, a regional approach.

Given UNDP's focus on human resource development and capacitybuilding, also a main area of emphasis of the GEF Pilot Phase, it was decided to proceed with the identification of a project whose main aim would be to strengthen government and related national capacities in the area of biodiversity conservation and management. UNDP was under pressure to have the project operational prior to UNCED in 1992, and recruited a consultant to travel to the three countries to develop a project concept. Following his discussions with the national authorities concerned, the consultant recommended that the project to be designed focus on strengthening the institutional capacities in the areas of research, training, coordination and field practice.

UNDP endorsed the basic framework, and subsequently hired a different consultant, who later became the CTA, to formulate the full Project Document. This was accomplished through the consultant making three rather lengthy trips to the region beginning in mid 1991. It is worth noting that the key inputs to the design of this unwieldy, highly complex project were provided by only two consultants.

During the design stage, it was decided that, since other donors were heavily funding the wildlife sector, the project would focus on forests and wetlands, both under-funded ecosystem types. Training and education, awareness raising, research and documentation and field activities became project The lead national environmental agencies (NEAs) became foci. focus institutions in each country, even though it was recognized that all of them had institutional weaknesses. The control and patterns of disbursements of funds were major issues with the NEAs vying for control. UNDP considered for a time direct funding to about seven key players, but, after realizing they could not handle this administratively, opted for a project approach with one lead implementing agency with the proviso that many of the national and international agencies would be given responsibility for the implementation of certain components through sub-contract arrangements.

The project was signed just after the UNCED in Rio, and the project started with the fielding of Allan Rodgers, the CTA, in October 1992. Rodgers has played the most key individual

roles in both the design and the implementation of the project.

3.2. Relevance of the Project Concept

The basic concept of the project is to reduce the loss of biodiversity in East Africa through support for institutional capacity building of key, national institutions. It is therefore of interest to ask, first, to what extent the project addresses the causes of biodiversity loss in East Africa, and, second, whether institutional capacity-building was an effective strategy for addressing the threats to biodiversity and for reducing its loss.

3.2.1. Relevance in Relation to the Causes of Biodiversity Loss

In the design of a project, whose highest objective is to reduce the loss of biodiversity, one would expect to find a problem statement with an analysis of the threats and pressures that are responsible for the loss of biodiversity in East Africa, especially of high priority areas. This should be accompanied by an analysis of the causal factors behind these pressures. These analyses would normally be followed by the strategy that the project intends to employ to address the threats and their causes.

One finds almost no such analysis in the Project Document. On page 12 (of the signed Project Document) under "Programme Justification", it is stated "the globally important biodiversity of East Africa is under great threat of depletion", but presents no analysis of what the threats are.

It goes on to state, "There is inadequate capability within countries in the region to stem this depletion...", and then details areas of institutional weaknesses without developing the linkages between biodiversity loss and these institutions. The evaluation team feels that this lack of analysis and clear linkage is a significant weakness of the project concept.

What are the causes of loss of biological resources in East Africa? Each country and each site must, of course, be evaluated individually, but the people the most directly responsible for the loss of biodiversity in East Africa, as in most parts of Africa, are generally the local resource users -- i.e., the village-level farmers, herders, fishermen, hunters and woodcutters. Farmers generally have the greatest impact through clearing of forest, woodland, savanna and grasslands for conversion to fields. Use and misuse of resources is often affected, directly or indirectly, by people of wealth and power. The way local people use their biological resources will determine whether or not the resources are conserved or destroyed. Strategies to reduce the loss of biodiversity must ultimately result in changes to the way local people use their resources. The Project Document does not make it clear how this is to occur.

Changes in resource use leading to sustainable systems almost always require a good understanding of the socio-economic factors that cause people to misuse these resources. While these also vary from site to site, in East Africa they certainly include demographic growth, unsustainable agriculture and poverty. Other common factors in East Africa include outdated, inappropriate laws and policies, land tenure conflicts and systems, rapidly increasing urban demands for products such as charcoal, inadequate enforcement and other social, political and economic factors. Although it may seem a bit daunting, one must recognize that many of the basic causes of the loss of biological resources are closely tied to many of the same basic development problems that governments and donors have been dealing with for decades. The project document does not enter into this level of analysis of the problem.

Project concept and design could probably have benefitted from a broader range of expertise. This may have lead to a more comprehensive problem statement leading to modified strategies, objectives, outputs, etc.

3.2.2. The Importance of Institutional Capacity-building

This project concept focuses on institutional capacitybuilding as the principal means by which the project was to contribute to biodiversity conservation in East Africa. Institutional capacity is undeniably necessary for effective biodiversity conservation. Institutions are needed to: collect, analyze, and disseminate information of the biological resources of a country; to set priorities for conservation; to collect, analyze and disseminate information on the threats to biodiversity and the underlying causes of these threats; to develop and implement effective strategies for diminishing the threats to priority resources; to develop an appropriate policy environment; and to ensure the integration of biodiversity concerns into national and sectoral development plans. Strategies must involve solutions to the threats to biological resources and alternatives to the destructive use patterns of resource users. Ideally, the identification of the institutions to be involved in biodiversity conservation and an assessment of their capacity should be part of national strategies for biodiversity conservation. Such strategies did not exist when this project was conceived; they do not exist at the end of the project, and their preparation still has not been started in any of the three countries.

In hindsight, national biodiversity strategy preparation could have made a core output of this project. It probably would have served as a logical focal activity for the many institutions involved and almost certainly would have lead to a better definition of those other institutions that need to be involved in biodiversity conservation.

The CTA told the evaluation team that, at the time the project was being designed, biodiversity was largely equated with biology. As a result, most of the institutions supported by this project, other than the NEAs, are institutions that are involved with collecting, analyzing and disseminating information on biological resources and, to a lesser extent, those charged with managing forest resources and with awareness-raising. The project concept has focused on those institutions best placed for setting biodiversity conservation priorities rather than on those that have control over the resources and/or that are in a position to influence resource It has not focused on the institutions that can users. collect and analyze the socio-economic causes of the loss of biodiversity that are needed for developing solutions, or on those institutions best situated to extend alternatives to destructive resource use.

The institutions supported form a part of the overall equation of what is needed to develop sound biodiversity conservation programmes. The selection of implementing and cooperating agencies is probably not broad enough for the development of effective biodiversity conservation strategies and the development of alternatives. It is certainly not broad enough to effectively implement these future strategies.

3.3. Evaluation of the Project Design

3.3.1. Logical Coherence

The project document sets out a high level "development objective" that is supported by four "immediate objectives", which are further broken down into outputs, and outputs into activities. The evaluation team sought to analyze the logic of the structure, i.e., the extent to which each lower level (outputs and activities) would necessarily, if successfully implemented, lead to the achievement of the next highest level. The Mission's analysis concentrated on the development objective, immediate objectives, and the outputs which were also reviewed to determine whether they were realistic and clearly stated.

The development objective of the project is:

"To create the institutional awareness and capability within the relevant governmental and non-governmental organizations of East Africa, so as to ensure adequate protection of the biological resources (biodiversity) of the region."

The following remarks are pertinent:

- As argued above, the mix of organizations is not sufficient or broad enough to "ensure adequate protection".
- Except for awareness-raising of school children, the project provided relatively little support to NGOs, especially national NGOs.
- "Protection" is an unfortunate choice of words. Conservation would be more appropriate.
- Awareness-raising in government was not included in the original outputs, but was added as an output during the 1993 Tripartite Reviews.
- On page 13 of the Project Document it is stated, "It is expected that the rate of depletion of biodiversity will be reduced,..." This is certainly in line with the development objective, but is not at all a logical result of the immediate objectives. This project was not designed to have any significant impact on local resource users. National institutional capacity-building is a long-term strategy that should not be expected to have such a major short-term impact.
- This also assumes that governments, once convinced of the need to conserve biodiversity, will have the ability to bring about change in the resource use patterns of the farmers, herders and others who are impacting on the biodiversity of their countries. This has not happened in any of the three countries.

The four immediate objectives, each accompanied by the evaluation team's comments, are as follows:

- 1. "To create a biodiversity unit in each leading national environment agency with responsibility for integrating and coordinating biodiversity issues into other sections of government development activity and furthering regional cooperation;"
- This ambitious objective was desirable, but was dependent upon the NEAs having a level of institutional strength and political clout that they did not have or develop during the life of the project.
- "*Responsibility for integrating and coordinating biodiversity issues*" is a rather nebulous concept and remains so at the end of the project. Without the participation or co-optation of the line ministries having control over resource use, possibilities for succeeding in integrating biodiversity concerns into development plans were not optimistic.
 - 2. "To increase the quantity and quality of training in all aspects of biodiversity and improve levels of awareness of biodiversity in government"
- "*to increase training...in all aspects..*" is clearly unrealistic, especially when one goes beyond the biological side of biodiversity conservation into alternative land use/production systems. The outputs focus training on forestry, database development, wetlands and on specific needs of staff in the implementing agencies, but not on "*all aspects*".
- The definition of the types of training needed also would have benefitted from a more complete problem statement, a systematic assessment of training needs, and the preparation of national biodiversity conservation strategies.
- None of the outputs in the Project Document included awareness-raising in government, but this was added in the 1993 Tripartite Review and made an NEA function.
 - 3. "To upgrade the institutional capability to collect, analyze and disseminate information on biodiversity so as to further conservation;"
- The outputs and activities support this objective very well.
 - 4. "Within priority areas for biodiversity conservation, to undertake management and planning activity to enhance existing conservation capability in a demonstrative and integrated way."
- This is the only immediate objective that was to focus on field activities. One of the objectives of the GEF Pilot Phase was to test and demonstrate innovative approaches to biodiversity conservation, which would normally be done through pilot field activities. This concept, however, does not come out in the wording of the outputs and activities

under Immediate Objective No. 4 in the Project Document or in the Project Inception Report.

- The outputs and activities under this immediate objective only partially support the objective. Most of them are concerned with data collection and planning, but not with management. Uganda has two outputs that call for the preparation of a plan for Sango Bay and the gazettement of forest areas, but not management of these areas. In Kenya, the support for the Forest Department/Kenya Wildlife Service Memorandum of Understanding was mostly for joint training, rather than management. The Nakuru District focal area that is presented as a figure in the Project Inception Report (without supporting text) was a focus for studies not management. It is only in Tanzania that funding was provided for local community activities through an NGO (the Wildlife Conservation Society of Tanzania) and the Regional and District Forest Officers. There was no emphasis on innovation, however; the activities carried out are the quite conventional activities of tree planting by villagers, villager awareness-raising, forest demarcation and the like.
- The main innovative aspect was the bringing together of such a wide range of actors government agencies, universities, NGOs to work together in data collection and in training activities in the pilot areas.
- The priority area activities are all weak on the socio-economic analyses needed to assess the causes of pressures and to develop, test and extend solutions and alternatives.

3.3.2. Appropriateness of the Regional Approach

At the time the decision was made, the primary reason for opting for a regional project rather than three national projects was the accepted practice during the GEF Pilot Phase of approving only one project for any country, and national activities were already planned for Kenya and Uganda. In addition to expediency, this decision also made sense because the three East African countries form a mega-biodiversity region and share a variety of ecosystems, a richness in plants and animals, and issues of mutual concern. They are also linked by common history, problems, and peoples. With the "rapprochement" among the three countries and the re-establishment of the East African Community, the timing of the project was fortuitous. It is significant that the Final Communique issued by the Heads of State identified environment as one of the priority areas for collaboration.

The Evaluation Mission found that the regional aspects - and the sense of regionalism, belonging, and good will that it has created - to be among the remarkable strengths of the project. Project support was very appropriate in that it supported existing institutions and sought to strengthen the linkages between them, rather than to create new institutions. All three countries strongly emphasized the benefits of sharing experiences and learning from the comparative advantage of others, joint training, and creating and enhancing linkages among scientific and technical institutions.

One very positive result has been that countries have not only learned that expertise in environment and biodiversity exists in the region, but where to find it. Consequently, expertise in the region is becoming more frequently drawn upon rather than international expertise - which has the added benefits of being cost effective and assuring that expertise is built and stays in the region. The project has also been able to use progress in one country to push for action in another country. An example is Tanzania's ratification of the Convention on Biological Diversity - the lack of which was holding up the submission of a new regional proposal for financing under GEF. The project has contributed to the networking of the different environmental and natural resource agencies in East Africa and created a harmonized atmosphere for discussion which has facilitated progress in other projects, such as the Lake Victoria Environmental Management Programme (LVEMP). It has created linkages among the East African universities and research institutes, government agencies, parastatals, and NGOs in the region. One of the important practical results of all these linkages has been the enhancement of the standardization of collection and handling of data in order to allow exchange and comparison. This has been accomplished both through joint training activities and by the project twice sponsoring the annual meeting of the Regional Biodiversity Database Forum.

The Evaluation Team has not discerned any negative effects from this increased regional cooperation. On the contrary, it has been a highly positive experience.

3.3.3. Choice of Implementing Agencies

One of the key decisions in project design was the heavy emphasis on support to the lead national environmental agencies, what we are calling the NEAs in this report. This high level of support is the evaluation team's principal criticism of the choice of implementing agencies. Four project components in each country, for a total of 12 out of the 32 national components, were implemented through the NEAs -- the Department of Environmental Protection (DEP) in Uganda, the National Environment Secretariat (NES) in Kenya, and the National Environment Management Council (NEMC) in Tanzania. The most critical mandate given to the NEAs under this project was the task of coordinating the integration of biodiversity issues or concerns into the inter-ministerial government planning process. This implies that the NEAs had the authority and the backing of the government to bring this about.

The NEAs supported did not have this level of power during the design phase, nor did they develop it during the life of the project. The aim of the project was not to strengthen the capacity of the NEAs broadly, but rather to increase or enhance their capacity in specific technical areas. One of the key problems of the NEAs in all three countries has been their lack of clarity of mandate, leading to confusion in responsibilities, duplication of activities, and intense competition between rival environmental agencies within the three countries.

NES, which has a mandate and terms of reference but no legal act that formalizes them, provides an example. NES is divided into sections, but section heads have no clear set of duties, mandate or responsibilities. Staffing is very limited in comparison to NES' quite broad, sweeping mandate. Overall staff and funding have decreased in recent years. Some staff has been posted out to districts, but their role and authority at the district level is not clear. Because of these weaknesses, rather than involve NES, the World Bank used its influence to set up a new secretariat to carry out the NEAP. Since then, there has been political manoeuvring to replace NES by the new secretariat or a completely new organization. In the meantime, with the exception of the LVEMP which has offices in NES,

no other donors have provided support to NES while waiting for the government to decide what it will do. NES does not have government funding to pay for utilities, guard services and the like for its offices, and is hoping that LVEMP will cover these expenses. All this has weakened NES.

In Tanzania, the parastatal, NEMC, does have a legal mandate, but unrealistically broad. In 1991, the government created the Department of Environment (DOE) within the sectoral Ministry of Natural Resources. There is a great deal of overlap in the mandates of DOE and NEMC, resulting in confusion as to whom is responsible for what. NEMC has recently been attached to the Office of the Vice President, but the confusion of overlapping mandates with DOE has not been resolved. By taking it out of a sectoral ministry, the move, in principle, should facilitate its co-ordinating role and enhance its ability to integrate environmental concerns into the national planning process. NEMC does not have office space for a significant portion of its staff; this has been provided by the project.

In Uganda, the decision to create a new environmental agency - NEMA - was made towards the start-up of the project (but not related to the project); DEP is now in the process of being phased out. The pending creation of NEMA consequently undermined the authority of DEP throughout the life of the project.

One of the key tests of the institutional strengths of the NEAs is their ability to deal effectively with abuses made by people of power and influence. As an example, the excisions of natural forests from the public domain into private hands without respecting legal procedures is a major environmental issue in Kenya that directly affects biodiversity conservation. One would expect a strong NEA to take the lead in dealing with such an issue, but NES is quite far from having the political clout or backing to enable it to do this. Similar constraints exist in the other countries, with the possible exception of the newly created NEMA in Uganda. Although it is too early to judge, NEMA, having been established by an act of Parliament, should have a considerably more solid legal basis compared to the other NEAs. The evaluation team was dismayed to learn, however, that NEMA receives nearly all of its funding from donors, making future sustainability of the institution a major question.

The project has supported the capacity of all three NEAs to deal with wetlands conservation. Historically, institutional responsibility for wetlands had never been defined. Many different government agencies are concerned with wetlands in different ways, as are many different types of resource users at the level of the local communities. This is used as justification for giving the NEAs a central coordinating role. The biggest institutional constraint, however, is the fact that the NEAs either lack, or have extremely few staff at the local field level. NEAs may be effective in developing national wetlands policies, but they do not have the people at the local level to implement the policies or to develop/oversee/monitor sustainable use and management of the wetlands.

Types of institutions selected

At the time the project was formulated, the institutional capacity to provide for the conservation and sustainable use of biodiversity was very rudimentary. Moreover,

governments, universities and research institutes, NGOs responsible for or involved in protected area management had very little understanding of the concept of biodiversity, why and how biodiversity is threatened and possible measures to protect and conserve it. Government environmental agencies were institutionally weak in these areas, lacking trained staff and infrastructural and logistical support. University Forestry Departments emphasized forest plantations and industries, with little or no attention to natural forest management and conservation, or ecosystem management.

It was therefore important to promote the concept of biodiversity and ensure its integration into national and regional development plans and polices. The emphasis of the project on strengthening the human resource and institutional capacity of a wide range of governmental and non-governmental institutions in planning and managing the conservation of their biological resources was logical at the time. However the selection of agencies should have included a greater complement of agencies that are best placed to influence the local resource users and to extend alternatives to the destructive use of biological resources. The exclusion of the line ministries, such as agriculture, fisheries, industry - those dealing directly with the actual users of the resources - from project implementation had two consequences. First, it excluded those government agencies best positioned to develop, test and extend alternatives to the unsustainable use of biological resources. Second, it made it much more difficult to integrate biodiversity concerns directly into the planning processes of these key agencies.

3.3.4 Capacity-building versus Field Activities

The rational for designing this project with a heavy emphasis on building the capacity of national institutions is found in the preceding two paragraphs. Most resources went into training, vehicles and equipment, inventory and database development and activities to increase the general capacity of participating institutions. Relatively few resources went into field activities. Although one of the four immediate objectives focuses on field activities at priority sites in each country, the Project Document is rather vague as to what this encompasses.

The evaluation team feels that, given the weak institutional capacity at the time, it was logical that the project was designed to focus on capacity-building rather than field activities. Notwithstanding this, the field activities should have been much more problem-oriented, with a view to testing different strategies, solutions and alternatives to the destructive uses biological resources that threaten the biodiversity of the three countries. The results of the field activities, perhaps in the form of biodiversity conservation and management plans, should have laid a solid foundation for a follow-on project which would strongly focus on field activities to reduce pressures on the biodiversity of the three countries. Actual conservation of biodiversity will only occur when the rural resource users adopt sustainable resource use systems or economic alternatives to their destructive production systems and/or when appropriate laws and policies controlling use and access of resources are implemented at the local level.

The actual implementation of the field activities focused on studies, analyses and, at the very end, development of plans or concept papers. Much of the analyses have focused on

biodiversity and other physical parameters. Relatively little socio-economic analysis of threats, production systems and underlying causes have been undertaken. There have been few attempts to identify and to extend alternative production systems to resource users. There has been relatively little involvement of local communities in problem analyses, strategy development, testing of alternatives. or the monitoring and evaluation of these trials. There has been relatively little involvement of NGOs in field activities. There has been little involvement of sectoral ministries, other that forestry. There has been relatively little involvement at the district or local community level and that are strategically positioned to bring about the changes in resource use that will be necessary for biodiversity conservation

As a result, the project has made little progress in the development of effective strategies for reducing human pressures on biological resources in order to better conserve the biodiversity of East Africa. Although the evaluation team found that there is a general sentiment amongst the staff of the implementing agencies that future activities should be much more strongly focused on field activities, the project has not laid a firm base for a major shift to field activities in the immediate future.

3.3.5 Complexity of Project Design

This is a highly complex project consisting of four immediate objectives and 25 outputs, focusing on four main themes: research and documentation; training and education; awareness-raising; and field activities. The project's activities have been carried out both nationally in the three countries and regionally. In order to achieve its goals, implementation has been carried out in a somewhat modular approach by component. There are 37 components: 9 for Kenya, 14 for Tanzania, 9 for Uganda, and 5 regional. While the objectives, outputs, and budget of each component are fairly well described in the annexes of the Project Document and Inception Report, it is somewhat difficult to relate the components back to the outputs and activities described in the main body of the Project Document. This, in turn, complicated the Mission's task of determining whether or not an output had been produced and evaluating the degree of success (reference Appendix D "Summary Table of Project Implementation by Output).

The Evaluation Mission considered whether it might have been a more optimal use of resources to concentrate on fewer outputs and components and fewer implementing agencies. Considering the aim of the project was to enhance the capacity and raise the awareness of, as well as create linkages among institutions already or potentially involved in biodiversity conservation, the Mission found the wide range of implementing agencies well justified. On the contrary, participation should have been extended to include, in addition to forestry, other institutions involved in the exploitation of biological resources (agriculture, fisheries, etc.), and other institutions that have the capacity to intervene at the local level.

Disadvantages were that such an array of institutions and variety of outputs and activities created administrative and managerial problems, as well as some confusion about lines of responsibility. It was remarked on a number of occasions, normally by those institutions operating under imprest accounts, that it was not clear who was responsible for initiating or

taking action - the CTA, the NPO, the lead environmental agency, or the institution concerned itself. This was not always clear in the Project Document, the Inception Report, or the component descriptions. The complexity of the project design made it highly dependent on the personality, breadth of knowledge, and competence of the CTA. In this respect, the project's replicability is questionable.

Flexibility in implementation and the use of budgetary resources was also constrained because of the multiplicity of outputs and actors. While there was a high degree of flexibility to reorganize priorities and related budgets within components, such revisions were very difficult between components since it required the agreement of the National Project Steering Committee and, if it was a regional component or had regional ramifications, each of the three countries.

As noted in the Mid-term Review, the project should have given some attention to raising awareness within government agencies of the need for and benefits of people's participation in resource management, and on more piloting of stakeholder participation in natural resource management. Some awareness of this need seems to have grown, however, out of the pilot field activities when gaps in and needs for specific socio-economic information and indicators became apparent. This is another area that could have benefitted from a clear awareness-raising strategy.

3.3.6 Measures Taken to Correct Design Weaknesses

The project was able to take advantage of built-in mechanisms which made it possible to correct some of the weaknesses in project design as they evolved. The Inception Report, Tripartite Review (TPR)s, and Project Steering Committees (PSCs) served this purpose. With the exception of the 1993 Tripartite Reviews which was instrumental in approving major changes in the implementation of the project, TPRs are covered in sections 4.1.2.2 and 4.1.2.1 under "Project Performance" below.

It became apparent within the first few months of the entry of duty of the CTA, that planned managerial, administrative, and technical support was inadequate for such a complex project. The CTA was over-burdened with administrative concerns, which limited his contribution of technical inputs - a problem which continued throughout the life of the project.

A number of measures were taken to correct this imbalance, and were incorporated into the Inception Report and adopted by the three countries during the 1993 Tripartite Reviews (which were held nationally). For the most part, the changes introduced facilitated and enhanced the implementation of the project by increasing the number of project staff. The actual project concept and design was determined by the TPR to be relevant. Modifications included:

 Change in Terms of Reference of National Project Co-ordinators - The NPC's expected to receive FAO salaries while remaining civil servants. Since NPCs cannot be Government counterparts and paid by FAO at the same time, it was decided to recruit NPOs to provide administrative, managerial and technical support to the project; the Terms of Reference of the NPCs were modified accordingly to reflect their role clearly as national Government focal points to the project.

- ii) Addition of National Project Officers (NPOs) three full-time NPOs, one based in each country, were included to assist the CTA in the day-to-day running of the project. Salaries are paid by the project and they are considered FAO staff members. Draft TORs were included in the Inception Report and revised and finalized during the 1993 TPRs. The Evaluation Team felt that the NPOs greatly facilitated the CTAs work and made important contributions to the project. Their technical and administrative competence and enthusiasm were assets to the project.
- iii) The addition of a P-4 Training Expert - It was envisaged that this additional expertise could alleviate some of the managerial burden of the CTA. The expert was to be responsible for carrying out many of the training activities, as well as providing additional technical and administrative support. The appointment of the P-4, which was originally envisaged to have a duration of 24 months, was rather controversial, and consensus-building among the three countries proved to be a prolonged and painstaking exercise. The expert was only recruited in early 1995, served for one year, and had already been separated by the time of the Evaluation Mission. By the time of her recruitment most of the training activities had either been carried out, were under way or planned, and the utility at such a late date was therefore questionable. The Evaluation Team strongly feels that the project could certainly have benefitted from this additional support, with perhaps even greater focus on assisting in the administrative and financial management of the project, and that it is unfortunate that the recruitment could not have been undertaken immediately following the agreement of the 1993 Tripartite Reviews. It could have freed up the CTA to spend more time on substantive, technical issues.
- iv) The budget was revised accordingly to account for these major changes, requiring a downscaling in some of the project components and activities.

In addition to endorsing the changes proposed in the Inception Report, the first Tripartite Reviews, which were held in 1993 on a national level in each of the three countries, made three significant recommendations:

 To hold only one joint TPR in the future each year in alternating countries, instead of holding three separate TPRs. This was meant to strengthen regional cooperation and linkages, as well as raise awareness about the project's activities in all countries. Since the Project Steering Committees were responsible for providing technical guidance and monitoring activities on a national level, the Evaluation Team found the regional TPRs to be an effective mechanism for treating regional issues.

- To delete the first Output 2.4 regarding Environmental Impact Assessments (the Project Document inadvertently contains two Outputs 2.4), since this was being covered by other donors.
- iii) To add Output 2.9 regarding strengthening the capacity of Government institutions to raise awareness of natural resource conservation in Government.

Subsequent PSCs and TPRs proposed minor changes, none of which addressed the shortcomings in project design, some of which, by late 1994, had been highlighted by the Mid-term Review.

It was recognized during the first year that other sectoral ministries, especially agriculture, should have been brought into the implementation of this project. Solutions were sought during the first tripartite reviews, but all budgetary resources were already allocated, and it was not possible to bring in other implementing agencies. The team was advised that the issue was also raised during the design stage and that it was UNDP's decision to not include agriculture.

The evaluation team has criticized the design for not being focused enough on socioeconomic solutions and alternatives to the human pressures on biodiversity. The team felt that this design weakness was not sufficiently recognized during project implementation and no significant corrective measures were attempted.

4. PROJECT PERFORMANCE

4.1. Project Management

4.1.1. FAO Management

There was broad, general satisfaction with FAO management of the project. While project staff and consultants are covered in the section below, general comments regarding FAO management include:

- (i) Procurement by FAO was handled quite efficiently. Delays were reasonable and quality of equipment procured was generally high.
- (ii) The use of the Contractual Services Agreements (CSAs) proved to be an innovative, effective means of managing/disbursing funding to national and international agencies in most cases. It was also an effective means of making the institutions responsible and accountable for the implementation of their components. Once the CSAs were established, the subsequent administrative burden was reduced. More detailed information on CSAs is included in section 4.1.1.3.
 - (iii) The most frequently encountered criticism of FAO management was the inability of implementing agencies to obtain timely budget information, especially on the amount of funds remaining for each component.
 FAO accounting is done by line items and cannot be directly attributed

to the 32 project components or to a specific country. This has made it difficult for the CTA and the participating countries and institutions to know how much money has been spent and how much remains in the budget for each component. Especially over the past half year as the project draws to a close, this lack of up-to-date information has made it increasingly difficult to manage the project.

(iv)FAO has provided technical support to the project through a Project Task Force, as well as through the CTA's personal contacts with other divisions. The project could have benefitted more from the full range of technical expertise available in FAO, not only from the forestry sector, but also in agriculture, agro-forestry, development support communications, etc.

4.1.1.1. Delivery and Performance of Technical Assistance

By far the most critical technical assistance position on this project has been that of the CTA. The CTA has been one of the great strengths of the project and has been critical to its level of success. His dedication to the project and its objectives has been obvious. This may stem in part from the fact that he played the lead role in designing the project. His unique background, strong familiarity with the region and pre-existing network of personal contacts in the region have all been great assets. The team was frequently told that whenever problems arose, the CTA was always there to deal with them quickly. Furthermore, his personal contacts frequently made it possible for him to reach key decision-makers much more promptly than someone new to the region. The Mission encountered a quite widespread sentiment that few other individuals could have made this complex project work as well as it did.

Perhaps the most serious criticism of the CTA has been a tendency to try to do everything himself. He has spent a large part of his time on project administration, and this has limited the amount of time that he has been able to dedicate to serving as technical advisor. The CTA has not been quick to push for assistance in relieving him of some of these administrative duties. The CTA told the Mission that he and others viewed biodiversity conservation primarily as a biological question during the design stage. This initial orientation, combined with a heavy administrative load, may have limited the project's evolution towards a more balanced approach, within budgetary constraints, to biodiversity conservation, with a larger emphasis on socio-economic analyses of pressures and on strategy development and testing for reducing these pressures. Because of the project's heavy dependence on the personality of the CTA, the mission has doubts about the replicability of the project.

National Programme Officers and Support Staff

The technical and administrative competence of both the NPOs and the support staff, as well as their enthusiasm and commitment were project strengths.

Fielding of consultants

Although there were a few specific criticisms encountered, the evaluation team found the overall level of satisfaction with the timeliness and professional competence of the consultants fielded by FAO to be generally good. There were some complaints about limited opportunity for input in the selection of candidates. Part of this seems to have been an internal problem in certain implementing agencies where management did not involve the staff that were to work directly with the consultants in the selection of candidates.

4.1.1.2 Procurement of Equipment and Supplies

(a) Vehicle purchase

The total value of the equipment procured under the project was approximately US\$ 1.65 million, or about 16% of the project budget, the greatest portion of which was utilized for vehicle purchase. The Mission considered whether it was a reasonable use of resources to purchase so many vehicles, a particularly large number for a technical assistance project, and concluded that most of the vehicles were appropriate, put to proper use and had a positive impact on the institution and on their ability to render the services and produce the outputs required. In many cases, the vehicles were a major contributing factor to the successful completion of an activity and the quality of the output. The training was more effective because it was possible to carry out the necessary field work in order to put theory into practice.

There were a few instances where vehicles were inappropriately used or not properly managed, but the CTA and project staff made every effort to rectify the situation.

With regard to **sustainability**, there is a good chance that many vehicles will be grounded when the project comes to an end because the necessary maintenance and running costs have not been allocated. Government agencies and universities will probably be most affected, while NGOs and parastatals may fair better. At least one government agency and university have sold most of its fleet of vehicles. Donor preference to purchase new vehicles rather than repair and provide maintenance and running costs for those already in the government pool/agency/institution contributes to the problem. Beyond the ability to maintain and operate vehicles, the ability of the implementing agencies to eventually replace those supplied by the project is even more problematic.

(b) **Computers**

Computers and related equipment were the second largest element of the equipment component. Most of them were for the database development component of the project, and were purchased under a CSA with UNEP. Serious delays were encountered in the procurement of the equipment, and, when delivered, some were missing parts or, in one case, a warranty. While specifications may have been appropriate considering the pre-project state of the databases, if they existed at all, the computers purchased sometimes did not have sufficient capacity to carry out the more advanced and sophisticated application of database management. UNEP's procurement process is slow and very bureaucratic, and should not be relied upon to handle this function in the future.

4.1.1.3 Suitability of the Contractual Services Agreement (CSAs)

Contractual Service Agreements were an innovative mechanism refined by FAO to provide direct funding to various institutions to carry out project components. CSAs set forth the terms of agreement between FAO and a recipient organization - governmental agency, parastatal, NGO - for completion of a defined objective within the project through the provision of services and project outputs. They are legally binding instruments which clearly define each party's responsibilities and accountability; outputs and activities to be performed, as well as the inputs and services to be provided in order to achieve the objective are described in detail and the budget fully costed. Funds are paid directly to the institution concerned, and expenditures reported through the internal accounting system of the institution. A progress report and summary of expenditure are to be reported on a sixmonthly basis.

Seventeen separate CSAs were concluded under the project: 6 regional, 4 in Kenya, 5 in Tanzania, and 3 in Uganda, ranging in size and scope. The combined value of the CSAs was approximately US\$ 2.5 million, or 25 percent of the project budget, with the largest between FAO and UNEP for database development (budget: US\$ 380 million) and the smallest between FAO and the Kenya Wetlands Working Group (budget: US\$ 21,000).

Setting up the CSAs in the beginning was a rather lengthy process because of unfamiliarity with the process on the part of project staff and because of the detailed information required by FAO headquarters. Until the CSA was signed by both parties, activities were implemented using funds advanced through the project imprest account, which was operated by the CTA, thus preventing most delays to project implementation. The amount of time required to finalize the agreements seems to have been greatly under-estimated by both FAO and project staff. Given the detail and time required, small CSAs are probably not very cost effective.

CSAs are a means of endowing the recipient organization with greater responsibility and accountability. The evaluation team believes that this is an effective strategy for building the institution's capacity. This modality offered some degree of flexibility in implementation in that the institution could respond to immediate needs; amendments to the CSA could be made in consultation with the CTA and FAO. The budget, however, was fairly immutable because of the multiplicity of implementing agencies and activities involved in the project. Once completed, CSAs subsequently reduced the administrative work of the CTA and the project, and were a means of bypassing highly bureaucratic, central government treasury procedures. By devolving much responsibility to national agencies, CSAs served as a good compromise when the human and institutional capacity were not sufficient for national execution.

With only a few exceptions, CSAs functioned very well. Most CSA holders performed with enthusiasm and clearly appreciated the increased responsibility. In many cases, they certainly

contributed to the institutions' developing a sense of ownership. Only a few CSAs experienced delays in implementation because of bureaucratic inefficiencies and slow disbursement within their own institutions. Several institutions have been slow in complying with reporting requirements or have produced reports of poor quality. Personalities seemed to affect the efficient functioning of the CSAs.

The only negative aspects of CSAs that the Evaluation Mission encountered were that it was not possible to monitor the monthly use of resources as with imprest accounts, thereby reducing transparency, and the CTA had less control over the quality and timeliness of the activities and outputs once all the CSA funds had been disbursed to the recipient organization. A few reports were late, outstanding or of sub-standard quality, as at the time of the Evaluation Mission.

In the future, the decision to use CSAs should be made on a case-by-case basis, after careful analysis and in consultation with the recipient organization. Appropriate criteria for deciding when CSAs should be used need to be developed, taking into account the clarity and size of the programme, and bearing in mind that experience from this project shows that CSAs are most successful when the institution has a clear view of where it wants to go, and the desire and capacity to drive the institution. When only a small level of resources are involved, it may be advisable to conclude a different contractual arrangement with the institution to be entrusted with providing the services and outputs.

4.1.1.4 Government Contribution

The Project Document stipulates, under section E "Inputs", that the three national governments would provide counterpart staff, office accommodation, and administrative support. It was not foreseen, however, as a prior obligation or prerequisite to the start-up of the project.

Significant delays were experienced in the beginning of the project because office space was not allocated nor counterpart staff designated. In Kenya, the project rehabilitated the top floor of the building housing NES, and, until very recently, paid utilities and security expenses. As of the time of the evaluation, NES had not taken over these payments. Because of the lack of space in Tanzania, the project was obliged to rent a house which initially accommodated the project headquarters, as well as the NEMC Database, Awareness, and Wetlands Units. There was also a shortage of qualified staff, and it took approximately 1 1/2 years for the posts to be established and filled in NEMC. The APO assisting the Zoology Department of UDSM still does not have a full-time counterpart staff.

These constraints caused delays in project implementation and pose problems for the sustainability of certain project activities.

4.1.2 Oversight, Guidance and Monitoring

Two principal mechanisms were used to oversee and monitor project implementation and provide technical guidance; these were National Project Steering Committees (PSCs) and the

Tripartite Review process. At FAO Headquarters, a multidisciplinary Project Task Force was established to monitor project implementation and provide technical oversight to the CTA.

4.1.2.1 National Project Steering Committees (PSCs)

PSCs were established to monitor project implementation, ensure integration of project activities within each country, and provide national direction and technical guidance; in principle, they were to be convened twice a year. Project Special Steering Committees (PSSCs) were held once a year for the purpose of reviewing the national Project Performance Evaluation Report (PPER) before its consolidation and presentation to the Tripartite Review.

According to the Mid-term Evaluation, PSCs in Kenya and Tanzania were slow to become established and met infrequently, dealt primarily with administrative rather than technical issues, and were not fulfilling their monitoring function or providing guidance. The agendas were overloaded and, consequently, only allowed for a superficial review of the many issues which were discussed.

Corrective actions were taken, and sub-committees were established to focus on specific technical issues and topics, although a few were set up to concentrate on administrative matters.³ The Evaluation Mission found that, as a result, the agendas which were once heavily overloaded mainly with administrative issues became more manageable, and PSCs began to fulfil their roles better and meet more frequently. They became an effective mechanism for monitoring project implementation, although the sub-committees should have met more frequently. Institutions involved were able to present technical problems and exchange views. PSCs became more effective at problem-solving. Decisions could be made by the PSC to reallocate scarce resources if a component was not performing satisfactorily.

PSCs also served as a forum for facilitating linkages and raising general awareness, essentially among the members of the PSC, about the many project activities. There was very little evidence, however, that this awareness trickled down to other actors involved in project implementation that were not members of the PSCs. Integration was more apparent with institutions involved in the implementation of a component or in similar activities (such as database development, inventories), and much less so between unrelated components.

The Mission found that the primary weaknesses were that benchmarks and criteria for evaluating and monitoring progress

³ In Uganda, four sub-committees were established: wetlands, forestry and awareness, finances, and equipment and vehicle handover; in Tanzania there were also four, including: biodiversity, coastal forests, awareness, and inventory. Kenya pursued a different course; three sub-committees to the Inter-ministerial Committee on the Environment (IMCE) were set up, including: IMCE Sub-committees on Biodiversity, Wetlands, and Awareness.

were never developed (output 1.4), and project/component workplans were <u>ad hoc</u>, sporadic and, if they existed, not very detailed. The PSCs and Tripartite Reviews could have performed their roles more effectively had these tools been produced.

4.1.2.2 Tripartite Review (TPRs)

TPRs are the standard annual review process involving the three partners - government, UNDP, and the Executing Agency. As mentioned in section 3.3.7 above, the first TPRs in 1993 were held on a national level at which it was agreed that all future TPRs would be regional. This decision enhanced the regional nature of the project, promoted cooperation, and facilitated linkages among the countries by bringing participants together. Its most important contribution to the project was that it served as a forum to reach consensus on major project revisions (human and financial resources, project activities, etc.). The Mission considered the TPR process to be effective.

4.2 Degree of Achievement of Project Objectives

As seen earlier, the design of this project set forth four immediate objectives, each of which was intended to contribute to the overall development objective. This section evaluates the degree of success in achieving these objectives, the constraints encountered and how they were dealt with. Each immediate objective is broken down into a number of outputs and each outputs into one or more activities. Appendix D presents an implementation summary of outputs in table form presenting the number for each output, its description, the related project component(s), the implementing agency(ies), whether or not the output was achieved, the team's subjective assessment of how successful it has been and notes on principal constraints encountered.

The evaluation team found that the project has been very successful in achieving two of the immediate objectives, and has had limited success on the two others.

4.2.1. Creation of National Biodiversity Units (Immediate Objective 1)

The first immediate objective is one of the two that were the least successful. It is stated in the project document as follows:

To create a biodiversity unit in each leading national environment agency with responsibility for integrating and coordinating biodiversity issues into other section of government development activity and furthering regional cooperation.

In hindsight, this objective proved to be overly ambitious. It is based on the presupposition that the national environmental agencies (NEAs) themselves had the mandate, the authority and political support needed for them to integrate environmental issues into the government planning process across all sectors. As we have seen in Section 3.3.4, none of the NEAs had this power during the project design and none of the NEAs supported developed it during its implementation. Only in Uganda does it appear that this situation is being rectified with the very recent creation of a completely new NEA, NEMA, which is replacing DEP.

In all three countries, each NEA has assigned or recruited at least one staff member that has been given the title of Biodiversity Officer. Through the Project, a new NBU was created in NES in Kenya, but no one is assigned full time to the unit. There is no TOR for the unit or its staff. A new staff member was recruited to serve as Biodiversity Officer in NEMC in Tanzania, but no formal unit was created. The project supported the pre-existing small NBU in DOE in Uganda. All three were supported with training, vehicles and office equipment.

As the end of the project nears, the three NEAs still do not have a clear vision of what the purpose and objectives of the NBUs are or should be. Other ministries are not required to involve these units in the planning of activities that impact on biodiversity, nor have the NBUs developed clear strategies for achieving this. No formal processes have been developed in any of the three countries for coordinating the integration of biodiversity issues into the government planning process. The project should have been designed to provide greater direction to the NBUs. TORs should have been prepared from the outset and agreed upon by all parties.

Significant efforts were made by the project to deal with the weaknesses of the NBUS. In Kenya both the CTA and the Project Steering Committee attempted to facilitate the search for solutions. The project organized a special workshop for NES which resulted in a number of recommendations, but little action resulted.

All three NBUs are headed by relatively junior environmental officers. It is not surprising, with relatively junior government officials assigned to newly created units within NEAs that lack clarity of mandate and political clout, that these NBUs have not been effective in integrating biodiversity concerns into the general government planning process.

Inter-ministerial sub-committees have been created in two countries (Kenya and Uganda) and have lead to increased awareness and consideration of biodiversity concerns. A proposal for the creation of a sub-committee on biodiversity is under review in Tanzania by Government officials. One cannot say, however, that there is a formal process for integrating biodiversity issues into government planning and policy in any of the countries.

National biodiversity conservation strategies

Unlike the NEA database units, the project design did not assign the newly or recently created NBUs any clearly defined tasks on which to focus their energies and to "prove" It does state that each NBU was to contribute to themselves. the development of national biodiversity conservation strategies. This presupposed that such strategies would be under development during the life of the project. This did not prove to be true in any of the three countries. These strategies are required under the Convention on Biodiversity. The NBUs in Uganda and Kenya aided in the preparation of proposals for donor funding for the preparation of national biodiversity conservation strategies. These proposals have been submitted to certain donors, but no funding had been obtained at the time of the evaluation. Tanzania has not yet prepared such a proposal.

In summary, none of the three countries have yet started work on their national strategies. This has been unfortunate for the NBUs, because preparation of such a strategy, if they had been given the lead in its preparation, would have given the NBUs a clear, well-defined national planning exercise upon which to focus their energies during all or most of the life of this project. Such an important task may have lead the NEAs to assign more senior officers to head the NBUs. The strategies themselves should have lead to a better definition of the roles and mandates of the NBUs, as well as those of other institutions. The strategies are badly needed for guiding future biodiversity conservation efforts in the three East African countries.

Development of future programme capacity

The Project Inception Report specifies that the NBUs were to be responsible for two other outputs, first the definition of personnel and budgetary resources and mechanisms for future programming in biodiversity conservation and, second, for regional coordination of research and training activities in the same technical field. These two tasks were not achieved, and were scarcely addressed by the NBUs.

Wetlands awareness and capability

Immediate Objective 1 also included the development of greater understanding and awareness of wetland resources and improved capability and commitment to the conservation of wetland biodiversity. Wetlands awareness is covered in the general section on awareness raising in 4.2.2.2. As with the NBUs, the principal support for achieving this output was to the NEAs. The project supported the creation of new wetlands units in the NEAs in Kenya and Tanzania and supported the existing unit in DEP in Uganda. Regional support to these units was done under a CSA with IUCN in Nairobi, primarily through a series of workshops that included a considerable amount of field experience.

The Uganda Wetlands Programme served as the model for the other countries. Uganda is only the second country in the world (after Canada) to have a national wetlands policy. GEF support in Uganda served as a supplement to capacity and activities already developed through other donor support. In particular, GEF supported a national biodiversity inventory of principal wetlands and the creation of a biodiversity database, both in the DEP. This has been highly successful. It appears that key staff and activities will be taken on by NEMA.

In Kenya, NES did nothing in wetlands prior to the project. The NES Wetlands Unit had a staff of four, none of them full time, and three have subsequently been posted out to the districts, leaving only one person at the time of the evaluation. Work has been started on developing a methodology for wetlands inventory using district officers. They have not developed a good working relationship with IUCN; the reasons for this are not clear. An IMCE Sub-committee for Wetlands has been formed and Kenya plans to develop a national wetlands policy. Lack of staff is a major constraint. Tanzania also started a small wetlands unit in NEMC that serves as the secretariat to the inter-ministerial National Wetlands Committee (NAWETCO) that has been created. Tanzania has also recently decided that they wish to develop a national wetlands policy. Little has been done to inventory the biodiversity of the wetlands.

Overall success of Immediate Objective 1

In summary, Immediate Objective 1 has enjoyed very limited NBUs have been created in each of the NEAs, but the success. NEAs themselves have all lacked clarity of mandate and political clout. The assignment of relatively junior biodiversity officers to recently created NBUs within NEAs that lack clarity of mandate and political clout has not been a successful formula for integrating biodiversity issues into the general government planning process. Near the end of the project the NEAs and NBU staff lack a clear vision as to what the mandates of the NBUs are or should be. Clear strategies for integrating biodiversity issues into government planning have not been developed. Inter-ministerial biodiversity subcommittees have been created in two countries (Kenya and Uganda) and have lead to increased awareness and consideration of biodiversity concerns. The creation of the NBUs, however, has not resulted in a formal process for integrating biodiversity issues into government planning and policy in any of the countries.

4.2.2 Improved Biodiversity Training and Awareness

The project was very successful in achieving Immediate Objective 2, which is stated as:

"To increase the quantity and quality of training in all aspects of biodiversity, and to improve levels of awareness of biodiversity in government."

4.2.2.1 Training

In order to achieve this objective, the project focused on raising awareness and strengthening the capabilities of or, in most cases, establishing capabilities in, biodiversity conservation in the relevant departments in the East African universities, research and training institutions, indigenous non-governmental organizations (the wildlife clubs), and key government departments. Training was a major component of the project. Approximately US\$ 1.9 million, or almost 19% of the total budget, was allocated to the various aspects of training, including fellowships, study tours and workshops.

The sheer number of training activities, which were conducted both regionally and nationally and varied widely in subject matter, preclude its review in any great detail. The major advantages, disadvantages, and successes will instead be highlighted.

A systematic training needs assessment was **not** carried out prior to project inception. Instead the fields selected were rather a reflection of the perceived needs of the institutions, individuals, or components concerned. The evaluation team, however, found the selection of institutions and programmes, as well as the type and quality of training provided, to have been appropriate, well done, and of good quality, while making efficient use of limited resources.

Advantages/successes:

- The selection of theses and field work, which was all carried out in the region, benefit both the students and the institutions and served as useful inputs to the data gathering and analysis activities in the pilot areas. While carrying out their field work they worked with their sponsoring institutions.
- Most people trained are permanent staff of a national institutions or students with good prospects for being assumed as staff members of the sponsoring institution. The majority of them are returning to their host institutions.⁴
- Much of the training has been carried out through regional workshops and has been highly appreciated. This has resulted in considerable sharing of experiences and greatly expanded regional networking and linkages.
- The project has been successful in raising awareness and broadening the perspectives of both the government and university Forest Departments beyond their traditional emphasis on forest plantations and wood products to include natural forest management and biodiversity conservation. The universities have expanded the

⁴ The main exception is the Makerere University Institute of Environment and Natural Resources (MUIENR) in Uganda which has very few full-time staff. Efforts to obtain authorization to enlarge their staff have not yet met with success. The CSA with MUIENR provided for seven fellowships, and it is unlikely that any will be retained at the end of the training. It should be noted that MUIENR is the only natural resources institute in East Africa whose staff both lecture in the university, conduct studies/assessments, and provided specialized training outside the University.

scope of existing courses to include biodiversity conservation aspects, forest management, etc., and recommendations for revising syllabi to include new courses on biodiversity conservation and management have been made.

- The focus on the training of trainers was very appropriate and may have a multiplier effect and ensure that environmental and biodiversity concerns will continue to be integrated into course work and into work of government Forest Departments.
- In-service training of staff of government agencies was quite successful. For the most part, those trained are enthusiastic and putting their skills to good use.
- Regional study tours, workshops, and seminars have lead to an enhanced sense of regionalism, an appreciation of the strengths of particular national institutions within the region in the area of environment and national resource management, and increased contacts and networking. The development of certain national institutions into **centres of excellence** within the region should be supported.
- In the long-term, the training should have a positive impact on the reduction of loss of biodiversity, since many of those trained are the next generation of government officials, university professors, etc., and will hold influential positions.

Disadvantages/constraints:

- Most of the overseas fellowships (16 out of 24) were used in the United Kingdom.⁵ The countries could have benefitted more from using the fellowships in a greater diversity of universities and countries.
- University staff who were to undertake research/field activities under the project encountered problems in reconciling their teaching obligations with their research requirements. For this same reason, some students found that they did not receive adequate supervisory attention.
- Most of the research work focused on the biological aspects. Only a few theses/field work were concerned with the people/forest interactions. Research should be done, not in isolation, but with a view towards developing conservation/management programmes and include

⁵ The CTA explained that, in many cases, this was to take advantage of the variety of one-year MSc degree programmes rather than two-year programmes offered elsewhere.

community/people aspects. Not much progress was made in integrating the needs of the resource users and their interaction with the forests into courses.

- The impact in the government Forest Departments has been less impressive than in universities. Retrenchment and decentralization to district levels have been constraints. In a few cases, lack of counterpart staff will be a constraint to sustainability.
- Although the Evaluation Team found the institutions and fields of training selected to be appropriate as far as they went, the full range of needs to achieve effective biodiversity conservation were not adequately covered. Training needs should be systematically assessed in the future as a function of national biodiversity conservation strategies, the institutions involved in their implementation, and the targeted roles and responsibilities of these institutions and staff in relation to their present capacity.

Three aspects supported by the project in the area of training merit highlighting: fellowships because of their magnitude; environmental valuation because of its mixed reviews, and cooperation between the Kenya Wildlife Service and the Forestry Department because of its innovativeness and impact. This latter point, however, is covered under section 4.2.4.

a) Fellowships

Fellowships were a significant element of the training component; thirty-nine fellowships were granted mainly at the PhD and MSc levels, 24 of which were used at international institutions and 15 at national institutions. A breakdown of the fellowships is provided in the table below.

Country	Inter	nationa	l Instit	utions	National Institutions			Total
	Ph.D.	M.Sc. /MA	BS./di ploma	Total	Ph.D.	M.Sc.	Total	
Kenya ⁶	4	5	1	10				
Tanzania	1	5	1	7	3	3	6	13

FELLOWSHIPS

⁶ One PhD was cancelled; one fellowship was only for the first year of a PhD, and one for the first year of an MSc.

Uganda	2	5	_	7	3	6	9	16
GRAND TOTAL	7	15	2	24	6	9	15	39

b) Economic valuation of natural resources

AWF's degree of success in carrying out this activity has been highly polemical. The level of disappointment of some of the beneficiaries is, to a large extent, directly related to the low budget allocation for this component. Resources were sufficient to raise an awareness of, and generate interest in, the use of environmental and natural resource economics as a means of valuing natural capital⁷, but the workshops conducted were insufficient to develop expertise in environmental accounting methods. Training in this area should continue and the planning and finance ministries should also be targeted.

4.2.2.2 Awareness-raising

The general level of awareness of biodiversity values and need for its conservation has been raised substantially in the three countries. Efforts were made to raise awareness on three levels: government institutions and high-level government officials, primary and secondary schools, and universities. The project was very successful in raising awareness in the secondary schools, moderately so in the universities, and had limited success at higher levels of government while being more successful at the middle, technocratic level.

Almost every component made a contribution to awarenessraising, particularly the training component; much of the awareness raising has grown out of the multifarious activities undertaken by the large number of implementing agencies rather than programmed awareness-raising activities as such. The national and regional linkages developed and enhanced by the project have contributed significantly to awareness-raising. The real measure of success will be to see whether, in the medium- to long-term, there is any change in behaviour resulting in a reduction in the loss of biodiversity.

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⁷ In Uganda, for example, the level of awareness has culminated in the formation of the "Environmental Economics Association of Uganda (EEAU)".

The main constraints were:

- A general understanding and awareness of biodiversity values has been raised, but not of specific threats and solutions.
- Little effort was made by the project to raise awareness in other sectors having the greatest impact on the environment, such agriculture, fisheries, industry, among others.

a) Wildlife clubs

Through the wildlife clubs in the three countries, the project has achieved a high degree of success in raising environmental and biodiversity awareness at the secondary school level. The selection of the clubs as vehicles for raising awareness was very appropriate, and the clubs proved very capable of using project support to develop strong, positive programmes. The Wildlife Clubs of Kenya, an NGO already functioning relatively well before the project, has been the most innovative in making a small amount of resources go a long way, in using them for its decentralization process, and in attracting other donor support. The joint training workshops organized by IUCN have been very successful and enhanced the linkages among the wildlife clubs. WCK has served as a model and provided advice to the less-developed Wildlife Clubs of Uganda and the Malihai Clubs in Tanzania. All three clubs are enthusiastic and preparing proposals based on the awareness gained and training undertaken. Both WCK and WCU are creating endowment funds to enhance the sustainability of their programmes. Achievements can be measured by the discussions on curriculum reform between the wildlife clubs and the National Curriculum Development Centre, the creation of new clubs and district associations, and the increased donor support. There are good prospects for sustainability.

b) Universities

Awareness-raising at the university level was less structured, and has grown largely as a function of the fellowships, study tours, and other training activities.

c) Government institutions

The project has had only limited to moderate success in developing the awareness-raising capabilities of government institutions. During the inception stage, it was noted that an output to develop this capacity in government had been omitted, and Output 2.9 was therefore approved by the 1993 Tripartite Reviews.

The lead environmental agencies were given responsibility for this output, and Awareness Units were supported in NES (Kenya), DEP (Uganda), and NEMC (Tanzania). They were largely without clear terms of reference, and never produced awareness-raising strategies which might have given them direction, well defined goals, and specific target groups. With the possible exception of NEMC, staff were not assigned to these units on a full-time basis, but were also obligated to continue to perform other duties as required by the divisions to which they were attached.⁸ All three Awareness Units failed to produce the newsletter on a regular basis (Uganda only issued one of the 8 that were planned). Regular and widespread dissemination of the newsletter might have contributed to greater awareness.

Considerable progress has been made in raising the awareness of middle-level government technical staff primarily as a result of the large number of institutions and activities supported. Relatively little has been achieved with respect to high-level decision-makers. Effective methods for raising the awareness of policy and decision-makers has proved the most difficult. Notable exceptions are the seminar on coastal forests organized by WCST and the Forest Department for Members of Parliament, and that organized in Zanzibar for Permanent Secretaries.⁹

Conclusion

The training component has been especially successful; the capacity of universities, government agencies, and NGOs to understand and deal with the biodiversity conservation has

⁸ The staff in the awareness unit at NEMC also performed other duties, but seemed to devote more time to the project activities, particularly in raising awareness of wetlands, than NES or DEP. This may be because the unit shared office space with the project staff.

⁹ While the Evaluation Mission was in Tanzania, WCST and IRA/USDM organized a two-day meeting on the environment, which was addressed by the President of Tanzania who also attended an entire half-day session. Both WCST and IRA/USDM, both implementing agencies of the project, were strongly supported by the project staff (although apparently not financially by the project) in this very successful endeavour.

been considerably strengthened. Since capacity-building is a long-term endeavour, any impact on the reduction in the loss of biodiversity would only be measurable in the long-term.

Overall, the project has been successful in its awarenessraising activities. The activities of the NGOs, particularly the wildlife clubs have been highly successful, whereas those of government agencies have met with only limited success. A general understanding and awareness of biodiversity has been raised, but not of the problems and solutions. The exclusion of the ministries and agencies with control over the resources and/or that have agents in direct contact with the resource users from the awareness-raising activities was a major constraint to integrating environmental and biodiversity aspects into development plans and policies. In the future, awareness-raising activities will probably be continued by the national and international NGOs, particularly the wildlife clubs, while those of the NEAs are more tenuous.

4.2.3. Institutional Analytic Capacity Building

The third Immediate Objective of the project is stated as follows:

"To upgrade the institutional capability to collect, analyse and disseminate information on biodiversity so as to further conservation."

The project was very successful in meeting this objective. Most of the outputs under Immediate Objective 3 involved the creation and/or development of computerized databases. These include both biodiversity databases (with data on plants and animals) and databases of general environmental and thematic data useful for planning purposes. Database development was supported regionally through a CSA with UNEP in Nairobi. It also benefits from the services of two Associate Professional Officers, one in Uganda and the other in Tanzania. Database development was successfully undertaken in parastatals, NGOs, universities and the NEAs of Kenya and Tanzania. Some of the reasons for the success of database development are the following:

- The hardware and software for database development , especially for geographic information systems (GIS), have become much more user friendly in recent years.

- Database unit technicians display obvious pride in their ability to master and to demonstrate these relatively sophisticated technologies.
- Database development presents a clearly defined task on which energies can be focused.
- Database development, at least in its early stages appears to be a relatively apolitical task that does not immediately threaten established interest groups (this may change as they begin to be used in real life, conflict situations).

Within the three NEAs, the DEP in Uganda already had a functional database unit (it was largely co-opted for assistance in the development on their NEAP during most of the life of this project). A new unit was created in NES and a recently created unit supported in NEMC. Of the four project components in each country that involved assistance to the NEAs, database development enjoyed the greatest level of success, probably for the reasons listed above.

Although referred to as biodiversity databases in the project document, this is a misnomer. What has been developed in the NEAs (with the exception of the wetlands database at DEP in Uganda) are GIS-based, more general databases that can easily be used or adapted for general environmental analysis and planning purposes. This type of database is highly appropriate for NEAs. A true biodiversity database is much more specialized and probably not appropriate for an NEA. The database development at NES and NEMC concentrated on the priority field sites at Naivasha and Pugu Forest, respectively. The equipment and skills that has been developed should readily allow this capacity to be applied to different areas and problems.

Remarkable cases of biodiversity database development supported in whole or in part by this project include those of the National Museums of Kenya, MUIENR at Makere University in Uganda, the Forestry Department in Uganda, the Wetlands Unit in DEP and the Zoology Department in Tanzania. NMK, MUIENR and UDSM Zoology Department are entering data on existing collections into their databases.

Database Compatibility

Furthermore, it should be possible for all of these databases to exchange data. The project has actively supported a preexisting, informal regional group that has effectively established standards for biodiversity inventories and databases. The regional training and workshops organized by UNEP have also been key tools for both developing the interest in development of standards and the networks needed to make them work.

Forest and wetlands biodiversity inventories were very successfully supported in Uganda through the Forest Department and the DEP. The Forest Department had already defined their needs for an inventory of the biodiversity of forest reserves -- the project arrived at a propitious moment to provide the support needed. The wetlands biodiversity inventory was an appropriate add-on to an already strong wetlands programme funded by other donors. In both cases, the inventories were done simultaneously with database development. Within the Wetlands Units in DEP, the inventory team also did all the data entry. The project also supported the development of a common wetland classification scheme for the region.

The biodiversity inventory of forests in Uganda is designed to provide the raw data needed to implement a major national forest policy change. Uganda has decided that 20% of the land area of the circa 700 forest reserves in the country will be reclassified as strict nature reserves. The Forest Department seems to be committed to using the inventory and database as the basic tool for selecting the areas to be set aside based on criteria such as species richness and endemism.

Inventory work concentrated on inventories of plants and animals. Relatively little was done to develop survey methodologies to identify the threats/pressures on biodiversity, to spatially quantify and prioritize the threats and to analyse the causes of these threats with a view to developing solutions and alternatives.

Development of database capacity has involved equipment and software procurement (which was not done quickly), recruitment and/or appointment of staff, training, data procurement and data entry. In general, it is only now near the end of the project that database units are beginning to do significant analysis of the data entered. This is, of course, the point at which the capacity that has been developed becomes useful. UNEP conducted a project workshop on database applications for decision makers during the first week of the evaluation. It was based on specific applications and analyses done by the project's database components. Nearly all of the research supported by the project was thesis research done as part of the higher degree training. All thesis research was done in the individual's home country. Research topics were generally well chosen. This has certainly enhanced the capacity of the individuals and the institutions concerned to collect and analyse data on biodiversity related issues, but has not resulted in formal research programmes addressing these issues.

It is not clear how successful the project has been in achieving a free and effective dissemination of data and of analyses conducted using the databases or as part of the thesis research. The evaluations team's impressions are mixed on this question. This is becoming much more of an issue late in the project as the database units reach the point where they now have data and analyses that can be shared. A significant controversy developed in Uganda when certain implementing agencies made repeated requests to the Forest Department for data from their biodiversity inventory. The Forest Department has refused to release their inventory data before they are fully satisfied that they have verified it for errors and have conducted initial analyses that they wish to do, much to the frustration of the other agencies.

Overall success of Immediate Objective 3

The project has been very successful in supporting the development of institutional capacity to collect, analyse and disseminate information needed for biodiversity conservation. The development of database capability across a wide range of institutions has been quite exceptional. Database unit staff have taken pride in mastering these new technologies. Database units are just beginning to really apply the analytic powers of their hardware/software as the project draws to a close.

Most of the capacity built has focused on biological and physical analyses and data. This provides necessary information but not sufficient by itself. The capacity for biological information generation will need to be complemented by a greater capacity for socio-economic data collection and analyses in order to provide balanced information needs for biodiversity conservation. This should be relatively easy to incorporate into the established databases.

4.2.4 Priority Sites for Biodiversity Planning and Management

Immediate objective 4 is stated as:

Within selected priority areas for biodiversity conservation, to undertake management and planning activity to enhance existing conservation capabilities in a demonstrative and integrated way.

One of the major objectives of the GEF Pilot Phase was to develop, test and demonstrate innovative approaches and techniques to benefit the global environment. Although not specifically stated in the Project Document, it is presumed that Immediate Objective 4 was to serve this purpose because it is the only immediate objective to focus on field activities. In practice, however, the pilot areas served as foci and provided practical experience in applying tools and techniques learned or acquired through formal training, rather than as foci for developing innovative techniques for the conservation and management of the biological resources.

The strengths and weaknesses of the field activities carried out in all the pilot sites were virtually the same, and include:

Strengths

- The pilot areas served as foci for putting newly learned skills into practice in a multi-disciplinary approach through the collection and analysis of data in real life situations. The field activities were instrumental in developing capacities in survey and inventory techniques, data analysis, database development and GIS, and creating an understanding of biodiversity. This worked quite well. The field activities also led to a growing recognition that biodiversity is not just the biological resources, but that it is also necessary to analyze the pressures on and threats to biodiversity, the causes, the socio-economic aspects, and involve the stakeholders in the development of solutions and alternatives.
- Activities in Kenya and Tanzania also lead to the discovery that people of wealth and power are stakeholders in some of the key issues and, hence, often impediments to changes in policies.
- Creative linkages were stimulated and enhanced among government institutions, universities, research institutes and NGOs that collaborated closely in the field activities in the pilot areas.

- The inventory techniques developed and refined through the field activities have been useful to other projects.
- Collaboration with other donor-funded projects within the pilot sites was engendered. It has had a catalytic effect in attracting additional support for some of the activities initiated by the project.
- Support to the Forest Department/Kenya Wildlife Service Memorandum of Understanding has been highly successful, an example of what can be achieved through cooperation, and should be replicated.

Weaknesses

- The analyses focused strongly on the biological and physical aspects of each site, and very little on the pressures on biodiversity, the socio-economic and sociopolitical analysis, or other aspects required to develop solutions and alternatives for resource users. Very little was done to involve the stakeholders in the pilot areas.
- While the data collection and analysis resulted in a concept paper for a project in Uganda and is hoped to lead to a management plan in Tanzania, the field activities did not result in management activities or in "practical conservation measures", except in Tanzania, and there only in a limited way. No emphasis was placed in this project on the development and testing of innovative new approaches for the conservation and sustainable use of the biological resources.

4.2.4.1 Forestry Department/Kenya Wildlife Service Memorandum of Understanding (MOU)

The project supported the MOU between the Forestry Department and the Kenya Wildlife Service through the provision of joint training of the forest guards and game rangers of the two institutions. An operational base has been set up at Nyeri to coordinate joint patrols and forestry management activities in the Aberdares and Mt. Kenya. The result of this component of the project has been the development of a very effective level of collaboration and joint field activities between two institutions that had been traditional rivals. The collaboration has been so successful, that the two agencies have expanded their MOU now to cover 90% of the forested ecosystems of Kenya. It has proved to be an innovative approach to forest management and is expected to lead to a reduction in destruction. In the light of its success, both the FD and KWS are endeavouring to establish new partnerships and extend the MOU to other institutions; collaborative arrangements are now being worked out with NMK. It is expected that cooperation between these institution will continue to grow. This arrangement serves as an example of what can be achieved through cooperation and should be replicated.

4.2.4.2 Improved conservation of biodiversity in Nakuru District/Lake Naivasha

This was the pilot area for field activities in Kenya, although it was not listed as an output in either the Project Document or the Inception Report. It was selected because of its proximity to Nairobi, the numerous economic activities in the area - horticulture production, game farms, ranches and small-scale agriculture production - and the degree of threat to the Lake. Inventories were conducted by government agencies, universities and parastatals, particularly those involved in database development and, to a very limited extent, NGOs and communities for the purpose of developing a digital biodiversity database of Lake Naivasha which would contain information on plant and animal species.

Identification of some of the threats to Lake Naivasha and to the biodiversity of the area developed from the exercise, but this was not done in a systematic way. Socio-economic analysis and stakeholder involvement were minimal. The activities did not result in the development of management or conservation plans. One of the lessons learned was that economic interests of people of wealth and power are intimately involved with some of the key environmental issues at this site.

4.2.4.3 Coastal Forest Conservation Project

Universities, government agencies, NGOs, and PhD and MSc students have collaborated closely in carrying out inventories, surveys, research and awareness-raising activities. NGOs have been more involved in the pilot sites in Tanzania than in either of the other countries. Nurseries have been established, trees are being planted, boundaries are being marked, and a discussion process with select villages has been initiated. As in the other pilot sites, a plan for the conservation and management of the coastal forest is yet to be developed; no socio-economic analysis of the root causes of the pressures on the forests have been conducted; and community participation in problem analysis and strategy development has been minimal (community participation has primarily involved tree planting and joint patrols of the forest). The decentralization process, and links between national, regional and district levels which are still largely undefined, has been a major constraint.

On the positive side, the capabilities of the WCST has been significantly enhanced and it has become a major force in NGO activities at the local level.

4.2.4.4 Integrated planning for the conservation/management of the Sango Bay area

There was close collaboration among MUIENR, the government Forestry Department, Wetlands Programme, and the National Environment Information Centre (NEIC) in the data collection, analysis, and sharing of results.¹⁰ Greater willingness to share research results should be encouraged. Surveys and inventories on the biological side have been completed and the data are being collated and analyzed. The project has collaborated with other donors active in the Sango Bay area; for example, the results of the Darwin Project served as important inputs into the GEF activity. A concept paper for an integrated conservation and development project for the Sango Bay Area is being prepared, but no detailed management plan or project proposal. Work still remains to be done on the socio-economic aspects, definition of the threats to biodiversity, etc. as is the case for the other pilot sites.

4.2.4.5 The remaining areas of forest still ungazetted and of conservation value in southern Uganda area assessed and giver greater protection

Little progress has been made in this area. Trial activities undertaken in 1994 showed that there was little good forest remaining. The decentralization process has also been a constraint, and a number of policy issues need to be resolved, such as: the question of whether districts or central government have control over the forest resources, land tenure, among others. Retrenchment and staff relocation, particularly in the Nature Conservation Section of the Forest Department, has also been a constraint.

4.3. Performance of implementing agencies

4.3.1. National agencies

The Mission has not systematically ranked the performance of all the national implementing agencies, but has instead commented on particular strengths and weakness of certain agencies that stand out in some way.

Agencies that have performed especially well

¹⁰ There is much pressure on the Forestry Department to release its data. FD maintains that it will do so only after the data has been verified.

- Wildlife clubs All three wildlife clubs have displayed exemplary motivation and willingness to test and develop new techniques and messages. Wildlife Clubs of Kenya serves as an especially effective model for others.
- Kenyan Forest Department/Kenya Wildlife Service MOU The spirit of collaboration that has developed between these former rivals under their memorandum of understanding is an outstanding example of what can be accomplished when agencies overcome their difference to pool resources towards a common goal.
- The Forest Department of Uganda The FD serves as an excellent example of a proactive national agency that had thought through its own needs and was able to direct donor funding (in this case GEF) to meet those needs.
- _ National Museums of Kenya There is probably no other organization like the NMK in all of Africa. It has been very successful in attracting donor support and its reputation for high quality work and efficient use of resources is largely responsible.
- **MUIENR** The Makerere University Institute of Environment and Natural Resources has effectively combined teaching and donor/outside agency funded studies and is striving to play and active role in biodiversity conservation.
- **CNR** Zanzibar's Commission of Natural Resources in their work towards the creation of the Zanzibar Nature Conservation Trust may have developed the best example of community-based management of natural resources that the project has fostered.

Agencies that have yet to overcome certain institutional weaknesses

- **NEAs** The institutional weaknesses of the NEAs is dealt with in Chapter 2 and in Section 4.2.1.
- **Tanzania Wildlife Division** The CSA for project support to Pasiansi Wildlife Training School was established with the Wildlife Division for logistical reasons. They were unable or unwilling to move the money to Pasiansi, and much of the funds earmarked for Pasiansi were shifted to another component.
- Sokoine University Sokoine was designated as the lead agency for environmental accounting in Tanzania, but support was shifted to the Institute of Resource Assessment when Sokoine did not move forward in this area.

4.3.2. International agencies

UNEP

FAO developed a CSA with UNEP to support the development of databases in the three East African countries. This included regional training workshops, equipment and software purchase and technical backstopping of implementing agencies. The beneficiaries that the team met with were quite satisfied with the training and the sharing of experiences through the regional workshops organized by UNEP. However, there was general dissatisfaction with UNEP's handling of procurement. Delays were very long and equipment received sometimes had parts missing, was of insufficient capacity or of poor quality. The NEMC database unit never did receive two pieces of equipment ordered. Several participants also complained about UNEP's technical backstopping. They claimed that UNEP's technician frequently arrived in-country with little or no advance warning and without a work programme. Some felt that he had little to contribute to agency-specific applications.

UNEP has openly admitted that they are not administratively set up to handle procurement efficiently. They should not be asked to do this in the future unless they dedicate the resources to develop this capacity.

IUCN wetlands conservation

IUCN had CSAs for regional support for two different activities. The first was for wetlands conservation, one of the two focal habitat types for the project. IUCN already had an active wetlands programme with a full time wetlands specialist. Project support allowed them to expand their activities. CSA activities focused on three regional workshops and on the production and the distribution of documentation. The NEAs were focal institutions in each country.

IUCN's support for wetlands awareness and conservation can be considered very successful. A regional protocol for wetlands assessment was adopted including a common classification scheme for East Africa. Wetlands conservation were new activities for the NEAs in Kenya and Tanzania. All three NEAs have targeted national wetlands policy development. Uganda, which already had an active IUCN-supported wetlands programme, has completed their policy. Project-supported trans-border technical cooperation between Kenya and Tanzania has been very successful. IUCN did not succeed in developing a good working relationship with NES.

IUCN awareness-raising support

IUCN was also contracted to provide regional support to wildlife clubs and to the NEAs for awareness raising. The worked well for the wildlife clubs but was much less successful for the NEAs. The wildlife clubs targeted secondary school children. Project support to the awareness raising units in the NEAs was to target government decision makers. Although they started from very different levels, the wildlife clubs were very receptive and IUCN support worked well. New materials and activities for wetlands conservation and forest/biodiversity conservation were added. IUCN supported regional workshops for the three clubs that were very effective means for the clubs to share experiences and strategies. Support to the NEAs' awareness-raising units was made difficult by the overall institutional constraints of the NEAs themselves, as discussed elsewhere in this report. The NEAs found it very difficult to target government decision makers for hierarchical and bureaucratic reasons. None of them felt comfortable in this role, and IUCN's support was not effective.

AWF

AWF had a CSA to increase the support the development of capacity in environmental economics in government, universities and research institutions in the region. Although this was a new activity for AWF, the concept originated with AWF and was written into the project during the design. Two different technical advisors served in succession on this activity.

The subject of environmental economics was very poorly known in the region prior to the project. AWF has been very successful in raising awareness and creating substantial interest in pursuing the development of further capacity in environmental economics. They were perhaps less successful in building actual capacity. Several participants complained that the activity did not go far enough -- interest was generated but resources were too thin to develop significant capacity. AWF's present advisor told the team that the budget has been a major constraint in the last year. AWF's CSA was hit especially hard by currency fluctuations early in the project.

This activity has lead to the creation of a new NGO, the Uganda Association for Environmental Economics. Uganda and Tanzania are developing MSc degree programmes.

5. NGO AND STAKEHOLDER INVOLVEMENT

While most of the resources have been focused on government and parastatal institutions, the main beneficiaries of this capacity-building project, some efforts were made to strengthen a few of the national environmental NGOs. With a few exceptions, local and community participation aspects were absent, mainly because of the project's focus on the biological aspects, with little emphasis on the causes of biodiversity loss on the resource users. The theme of NGO and stakeholder participation has been treated in various parts of section 3.3 on project design. As mentioned earlier, one of the most positive and innovative aspects of the project was its bringing together of so many diverse institutions - government agencies, parastatals, nonprofit organizations - in most cases, for the first time to work towards biodiversity conservation. The project has been quite successful in developing linkages between government agencies and NGOs, with the possible exception of Kenya, and a high degree of networking has been achieved among the participating NGOs, particularly those involved in the implementation of the same or similar activities. The Mission felt, however, that although a number of NGOs were directly involved in the implementation of certain components through CSAs, the project could have benefitted from greater NGO participation in carrying out the field activities in the selected project sites.

One of the stated aims of the Pilot Phase of GEF was to promote participation and consultation with affected and interested parties, both NGOs and communities. The pilot field activities could have served as the main opportunity to work at local and community levels. In practice, however, stakeholder involvement was minimal. The project has been a learning process, and one of the lessons learned at an early stage of the inventory work was the need to include some analysis of the users, including socio-economic and sociopolitical data, as well as information on the use of the resources. In order to alleviate the tension between users and conservationists, it is necessary to fully involve the communities in all aspects of developing and implementing effective resource management plans.

Most of the institutions supported by the project do not have a presence at local or district level. In addition, the decentralization process under way in all three countries is disrupting and transforming existing institutional linkages between central and local levels. Although decentralization may ultimately greatly increase local stakeholder involvement and control over biological resources, how this will ultimately work is far from being clearly defined. Any future donor assistance will have to make allowance for this evolving situation.

6. COORDINATION WITH OTHER DONORS

Donor assistance to East African countries in the area of environment is very high, but is not coordinated to any great extent. As has been stressed in other parts of the report, support of rival environmental agencies and lack of coordination has contributed to undermining the authority of the NEAs supported by the project and to their poor performance. In Tanzania, an Informal Donors Group on Environment has been established, and is a forum for sharing information on ongoing and planned activities. In Kenya, donors meet on a monthly basis, and environmental topics have been addressed but not in any systematic way. The World Bank is trying to revitalize it and establish sub-groups on different topics, one of which would be on environment and natural resources, with relevant government agencies as chairpersons.

The project has served as a catalyst for attracting other donor support for many project-initiated or related activities, and it was sometimes difficult for the evaluation team to distinguish between what has been achieved with GEF funds and what has been achieved with other funds. Because of the inflexibility of the budget limit, the project was very pro-active and resourceful in attracting additional financial support for certain activities. For example, as a means of making optimal use of scarce resources and avoiding duplication of activities, the project co-sponsored workshops with other donors, including the EU in Tanzania for a workshop on coastal forests and FAO for one on forests, people and biodiversity, among others. In Uganda the project has established strong linkages with the EU-funded "National Forest Management and Conservation Project", and efforts are made to coordinate and complement each other's support to the These kinds of linkages should be Forestry Department. further promoted.

The increased capacity and competence of the institutions which have resulted from project support seems to have contributed to their ability to attract donor support. To name but just a few, NMK has become recognized by government and donors as playing an important role in biodiversity and is being given responsibility for carrying out the research component in projects. The wildlife clubs in all three countries, but particularly in Kenya, have become very successful in attracting donor support, and two of them (Kenya and Uganda) are in the process of establishing Endowment Funds. The EU and the Netherlands will continue funding for the coastal forest work in Tanzania which was initiated under the project. UNEP used its own resources to provide additional training to the Kenya Database and will continue support to Kenya through the UNEP/GEF Biodiversity Data Management Project. EIA and economic valuation courses will be continued at Makerere University with funds from the British Council.

The only criticism might be that, except for those areas in which they were directly involved, several donors noted that they were largely unaware of the wide variety of activities being carried out by the project. The newsletter was appreciated and seen as a very useful mechanism for raising awareness, but its publication and dissemination were sporadic. A more regular publication and systematic distribution of the newsletter might have enhanced donor coordination, particularly in the key areas in which the project was involved, and helped to attract more resources for biodiversity conservation.

7. SUSTAINABILITY

References from the project document

The project design did not place a great deal of emphasis on sustainability. There is one paragraph on sustainability under the section on Special Considerations, where it is stated:

> "There are very few new posts created which will require national funding in the future. No new institutions are created."

The focus on capacity-building of existing institutions is one of the strongest points of this project and one of the best guarantees that a significant portion of the accomplishments and increased capacity developed through this project will be sustained. The fact that support was spread over a wide range of institutions, although administratively difficult to manage, also meant that no single institution was faced with huge new budgetary demands that would be very difficult for them to sustain through their own resources after project completion.

The same paragraph on sustainability goes on to say:

"The project is designed in such a way as to give Governments greater ability to seek and use donor inputs, and thereby the project is believed to provide sustainable development." This is a quite a unique twist to the concept of sustainability. The conventional use of the term refers to the ability of project beneficiaries to sustain and finance activities and programmes with their own resources beyond the end of donor funding. However, one should not have any illusions. Donor funding for biodiversity conservation will definitely be required well into the foreseeable future. To the extent that biological resources are considered an international heritage, donor funding for biodiversity conservation in countries whose development needs are so great and whose resources so limited is very appropriate.

Positive prospects for sustainability

Most **people trained** are using their new skills and will remain in their positions for some time, or will be hired by their sponsoring institution.¹¹ How long this will continue will depend on future opportunities/needs for their skills, and, within government, on the extent of postings to unrelated positions. The ability of governments to retain trained staff will also depend on competing demands for their marketable skills from the private sector, international donors, and NGOs which normally offer better salary and other incentives. At least two of the governments have difficulty in paying staff a "living wage".

The enhanced **awareness** of biodiversity values is a clear accomplishment that will not be lost quickly. Whether it continues to grow or whether it starts to diminish will depend on future strategies and programmes. Awareness-raising activities will probably be continued by the national and international NGOs, particularly the wildlife clubs, while those of the NEAs are more tenuous.

One of the greatest strengths of the project are the **linkages** that have been stimulated and developed among a wide range of national government agencies, parastatals, NGOs, universities and research institutes. Because not only institutions, but people personally have benefitted from this increased cooperation, it is highly probable that many of the linkages will continue in the future.

¹¹ The exception is MUIENR which has very few full-time staff positions. Seven people were trained at the MSc or PhD level, and it is unlikely that MUIENR will be in a position to absorb or retain them.

Most people are very optimistic about continued **regional** collaboration in this field. The regional contacts, networks and relationships that have been developed are achievements that can be expected to have positive impacts for the next several decades.

Of those activities that are dependent on equipment purchased by the project, **database development** will probably be sustained relatively well, especially by parastatals, NGOs, universities and institutes. Operating and maintenance costs seem to be relatively modest. Database development may be more tenuous in the NEAs, especially in Kenya and Tanzania.

Questionable prospects for sustainability

The operations and recurrent costs budgets of all three governments are very minimal. In particular, their ability to operate and maintain, let alone replace, vehicles supplied by this project, will be very problematic. The government of Tanzania has recently sold most of their vehicles because they cannot afford to operate them. Government agencies' ability to maintain and renew their vehicle fleets will be perhaps more crucial for biodiversity conservation in the future as one moves towards field activities.

The enhanced capacity of the NEAs is quite tenuous. The roles and mandates of lead environmental agencies in East Africa, as in most of Africa, is quite fluid as governments continue to search for the best institutional structures for dealing with environmental concerns. This is best exemplified by the DEP in Uganda which was in the process of closing down during the evaluation as it has been replaced by the newly created environmental agency NEMA. Few of the staff who benefitted from training and support under this project have been recruited by NEMA. It is not inconceivable that NES and NEMC could suffer similar fates in the future. Of more immediate concern for the sustainability of the project has been paying significant portions of the costs of operating the offices of two of the NEAs (NES and NEMC). The project paid for the complete rehabilitation of the floor housing the project offices in NES and until very recently has been paying utilities and quard services for the NES offices. NES has not taken them over and is hopeful that expenses will be covered by the LVEMP project. More seriously, the project has been paying the rental of the office space for NEMC's database, wetlands and awareness units. NEMC staff in these units do

not know what happens now that the project is ending this support.

Capacity to carry out biodiversity inventories has been built, but inventories themselves are almost completely dependent on donor funding. It does not appear as though any funds have been allocated by the institutions themselves for monitoring and updating of the inventories. In a similar vein, the **pilot field activities** will not be continued after the project ends unless other donor support is found.

8. EXPECTED IMPACTS

- Awareness of biodiversity values/conservation needs have been substantially increased, especially at mid-levels of government amongst government technical specialists. Momentum has been built and most people are anxious to move forward.
- (ii) **Regionalism** has been considerably strengthened.
- (iii) The capacity for biological resource inventory and analysis has been considerably increased.
- (iv) The capacities of the universities have been significantly enhanced, and biodiversity aspects are being addressed into existing course offerings and may be incorporated into revised curricula.
- (V) The project has succeeded in bringing together a wide range of national and regional institutions - government agencies, universities and research institutes, and NGOs - many of which have not collaborated with each other in the past, for joint training. They have cooperated closely at field level in data collection, as well as in the analysis of the data collected and informationsharing. Before the project started, institutions were not aware of biodiversity or where to find general environmental information. As a result of the project, there is widespread knowledge about what information exists, which institution holds it, and how to obtain it. It is expected that these **linkages**, particularly those that grew out of collaboration in setting up the databases, and the knowledge gained will continue after the project ends.

- (vi) The project supported the Forestry Department/Kenya Wildlife Service Memorandum of Understanding through the provision of joint training. It is probably the first of its kind to integrate technical and operational aspects. The result has been the instillment of a greater sense of responsibility in the forest guards and game rangers and increased collaboration. It has proved to be an innovative approach to forest management and is expected to lead to a reduction in destruction. In the light of its success, both the Forest Department and KWS are endeavouring to establish new partnerships and extend the MOU to other institutions; collaborative arrangements are now being worked out with NMK.
- (vii) Although there was no baseline or monitoring system established, there has probably been almost no direct impact of this project on the loss of biodiversity in East Africa. Even in the priority pilot field areas, the immediate impact has probably been small to date (negligible). Local empowerment of communities in Zanzibar over their fisheries resources and the reported "end" of dynamiting of their reefs through villager interventions is one of the few clear, positive changes in resources use.
- (viii) There has been no identifiable impact on national development plans and policies. Strategies for integrating environmental and biodiversity issues into the government planning process are yet to be devised.

9. PRINCIPAL LESSONS LEARNED

The present situation in East Africa presents a highly unique opportunity for furthering regional collaboration on environmental and biodiversity issues. The high level improvement of relations among the three countries continues.

Collaboration and the technical level has been extremely successful. Staff of implementing agencies we met with seem to genuinely appreciate the new and renewed contacts and collaboration within the region and wish them to continue and grow.

One cannot expect to build effective government coordination through government institutions that lack clarity of mandate and political clout. The three national environmental agencies supported have not been given by their governments the clear mandates and the requisite level of political support needed to effectively integrate environmental issues in general into the government planning process. One should not expect this to be any different for biodiversity conservation issues. NES and NEMC were both located in sectoral ministries and the start of the project. (NEMC has since been move the Office of the Vice President.) A sectoral ministry cannot be expected to coordinate other sectors. In a general sense, it is probably a very high risk undertaking for any donor to support the development of capacity for specific functions within institutions that have more basic institutional weaknesses.

Part of the problems with the NEAs is due to the donors. Serious problems have resulted from the lack of donor coordination in the support of NEAs, NEAPs, and other planning/strategy documents. Donors compete amongst themselves over who will fund/sponsor different studies and institutions, sometimes with little or no consultation with government. There have been instances where a donor who does not want to work with one institution will use their influence to create or support a parallel institution that has overlapping or conflicting responsibilities with the first.

The national biodiversity units lacked a clearly defined focus. They could have been largely resolved if they had been mandated through the project with the coordination of the preparation of national biodiversity conservation strategies. Strategy development also would almost certainly have served to define strategies for reducing threats to biological resources and strategies for accomplishing this.

On a closely related note, the past decade has seen a tremendous amount of donor and government resources devoted to NEAPs/TFAPs/national conservation strategies/national biodiversity profiles and the like. There is a growing sentiment that it may be time for more action, that emphasis must switch towards implementation of all the plans and strategies that have been prepared. and fewer plans.

The development of effective strategies for raising the awareness of higher level government decision-makers and politicians of the need for biodiversity conservation is problematic. No clearly effective strategies have emerged. The role of the NEAs was not very effective for this task. Junior and mid-level environmental officers charged with awareness raising have been constrained by bureaucratic hierarchies. To the extent that people of power and influence with political clout are sometimes part of the problem, they can be expected to use their political influence to restrain the awareness-raising function of government agencies.

The development of effective strategies for biodiversity conservation must balance biological priorities (based on endemism, species richness, etc.) with socio-economic solutions and alternatives to destructive resource use practices. Threats to biological resources must be identified, prioritized and analyzed by causal factors. This must lead to the development of the identification, testing and extension of sustainable use of resources and alternatives to the destructive resource use patterns. The design of biodiversity conservation programs must involve expertise in both the biological and the socio-economic aspects.

Strategy development will require much more emphasis on the collection and analysis of socio-economic data, as well as on stakeholder participation in the process of developing solutions for conservation and management of the biological resources. One must spatially define what the pressures on the biological resources are, who are exerting the pressures and why in order to develop effective strategies with farmers, herders, fishermen, woodcutters, etc. for sustainable systems of resource use.

UNEP is not set up administratively to handle procurement, and should not be relied upon for this function.

10. RECOMMENDATIONS

Future priority areas for intervention

(i) Future projects/programmes for biodiversity conservation in East Africa should consolidate and build upon what has been accomplished by the project in order to reduce the pressures on specific, priority biological resources in the field. Strengths to build upon are the capacity to collect and analyze data on biological resources, the multi-sectoral, GIS-based database capacity that has been developed, the human resources that have been trained, the cross-sectoral national and regional networks and linkages that have been developed, the awareness that has been built, and a general desire to apply these new skills to real field situation.

- (ii) Related to the above recommendation, future field efforts for biodiversity conservation in East Africa should focus on recognized priority sites that have already been identified either through the project itself or through various strategies and action plans (see Section 2.4 for information on the biodiversity priorities of East Africa). These biological priorities should be refined over time using the inventory and database capabilities developed by this project and should be balanced with an analysis and prioritization of the threats to these sites.
- (iii) Community-based participation should be a key element of field activities.
- (iv) The integration of biodiversity concerns into national development planning and policies is dependent on the political will of the government authorities. Efforts should continue to be made to develop and implement effective strategies to raise the awareness of high-level decision-makers of the importance of environmental management and biodiversity conservation.
- (v) A greater awareness of wetlands as a resource has been achieved. Support for national wetlands policy development is needed in Tanzania and Kenya. The focus in Uganda should be on policy implementation and on field level wetlands conservation and management with close involvement of local communities. Similar efforts should follow in Kenya and Tanzania once an appropriate national wetlands policy has been developed.
- (vi) The continued use of public funds for the conservation of biodiversity needs to be justified. The project has raised the awareness of environmental and natural resource economics as a means of valuing this natural capital. With a minimal level of resources, a strong interest in the economic analysis of natural resources has been generated, but adequate expertise has not been created. Training in this field should continue, and economists in the planning and finance ministries should also be targeted.
- (vii) One of the national workshops (Uganda) strongly recommended that assistance be provided to develop national capabilities to implement the Convention on

International Trade of Endangered Species (CITES). Training of customs officials and the preparation of a manual on endangered/protected species (such as is reportedly under preparation in Madagascar) which could help the customs officials in the ready identification of animals were among the interventions proposed.

Institutional and policy development

- (viii) Governments need to resolve questions of overlapping mandates of national institutions charged with coordinating environmental/biodiversity issues and must provide these institutions with strong, legal foundations where this is lacking.
- (ix) Long-term biodiversity conservation will require a mix of interventions - institutional capacity-building, field activities, institutional and policy reforms, and an appropriate legal framework. The mix will vary from country-to-country depending on their own specific circumstances. All three countries should move quickly to develop national biodiversity conservation strategies, and donors should support these efforts. Strategies should define priorities from the biological perspective and from the socio-economic perspective of human pressures on the resources. The problem statement should address the linkages between demographic growth, extensification of agriculture and poverty and the loss of biodiversity. Strategies should be problem-solving oriented, seeking solutions/alternatives to the causes of the loss of biological resources. Institutions should respond to, and policies, technologies, etc. should be a function of, the threats to priority biological resources and the strategies developed to address these threats. In elaborating these strategies, countries should take advantage or be cognisant of trends, such as: reduced aid flow, improved regional cooperation in the area of environment, private sector development, decentralization, etc.
 - The identification of the complement of institutions that will be needed to effectively conserve biodiversity should be a key component of national biodiversity strategies. Strategies should define the roles and responsibilities of all institutions involved and should

identify weaknesses where further institutional capacity building will be needed.

A critical need for biodiversity conservation is to identify and support appropriate institutions that can effectively intervene at the local level to work in partnership with communities to test and extend sustainable uses of biological resources and to develop economic alternatives to destructive pressures on biodiversity. The choice and support of such institutions must be worked out in the evolving context of decentralization and increased empowerment of local communities and lower levels of government. Linkages with central institutions supported under the current project will need to be developed. An appropriate mix of governmental and nongovernmental institutions will be needed. Donor support should be performance-based increasing support over time to those institutions most effective in diminishing pressures on the resources.

Regionalism

- (x) Future efforts should continue to build and strengthen regional linkages and collaboration between the national institutions, but should not create new, regional institutions. Such cooperation in East Africa in the area of environmental management and biodiversity conservation is particularly effective because the countries form a mega-biodiversity region and either share, or have in common, a variety of ecosystems. The countries should continue to work together on issues of mutual concern, and share and learn from each other's experience.
 - The evaluation team believes there will still be major advantages in a regional approach in the future as emphasis switches to field activities and that these advantages are not necessarily dependent on the activities being focused on selected field sites located in transboundary areas. On the contrary, wherever there are common ecosystems, common threats, and/or common training needs among the three countries, there will be advantages in regional exchanges of experiences and expertise and sharing of training resources. Transboundary sites may present especially difficult complications to an already highly challenging situation. Given the present lack of proven strategies for

diminishing human pressures on biological resources, it might be best to avoid such undue complications at this point unless there is a pressing need for action (e.g. Lake Victoria).

(xi) The East Africa region could benefit, in a cost effective manner, from the special strengths and resources of particular national institutions in the area of environment and natural resources. The development of certain national institutions into centres of excellence within the region should be supported. Candidates include the National Museums of Kenya, Wildlife Clubs of Kenya, the Wetlands Programme in Uganda and the Forestry Department at Sokoine University of Agriculture in Tanzania.

Training

- (xii) Training needs should be systematically assessed and should be a function of national biodiversity conservation strategies, the institutions involved in their implementation and the targeted roles and responsibilities of these institutions and their staff in relation to their present capacity. The three countries highly appreciated the training provided through short courses tailored to meet specific needs.

Enhance project implementation

Use of professionally facilitated, team building (xiv) workshops should be employed on future biodiversity conservation projects involving a multiplicity of outputs, components and implementing agencies. At start-up, such a workshop should review the higher levels goals and objectives to develop a common understanding, should review and refine strategies for achieving these objectives and should analyze and refine the roles and responsibilities of each implementing agency to better work as a team toward achievement of goals and objectives. It is also a useful tool for mitigating conflicts between institutions. The use of independent professional facilitators may also be used during project

execution to address particularly difficult issues/conflicts that may arise between agencies.

(xv) CSAs were an innovative and effective mechanism for disbursing resources and endowing national institutions and NGOs with responsibility and accountability for providing services and producing specified project outputs. The modalities for the drawing up of the CSAs should be fine-tuned to be more efficient, and greater use of this mechanism should be used in the future.

Donor co-ordination

(xvi) Greater donor collaboration is required in the area of environment. Efforts should be made to avoid wasting scarce human and financial resources by supporting or creating rival national institutions which invariably only weakens the authority of the "lead environmental institution" by lowering the degree of acceptance by others of its lead role.